8-2020

Concurrent Enrollment and Early College: Assuring Postsecondary Access and Achievement

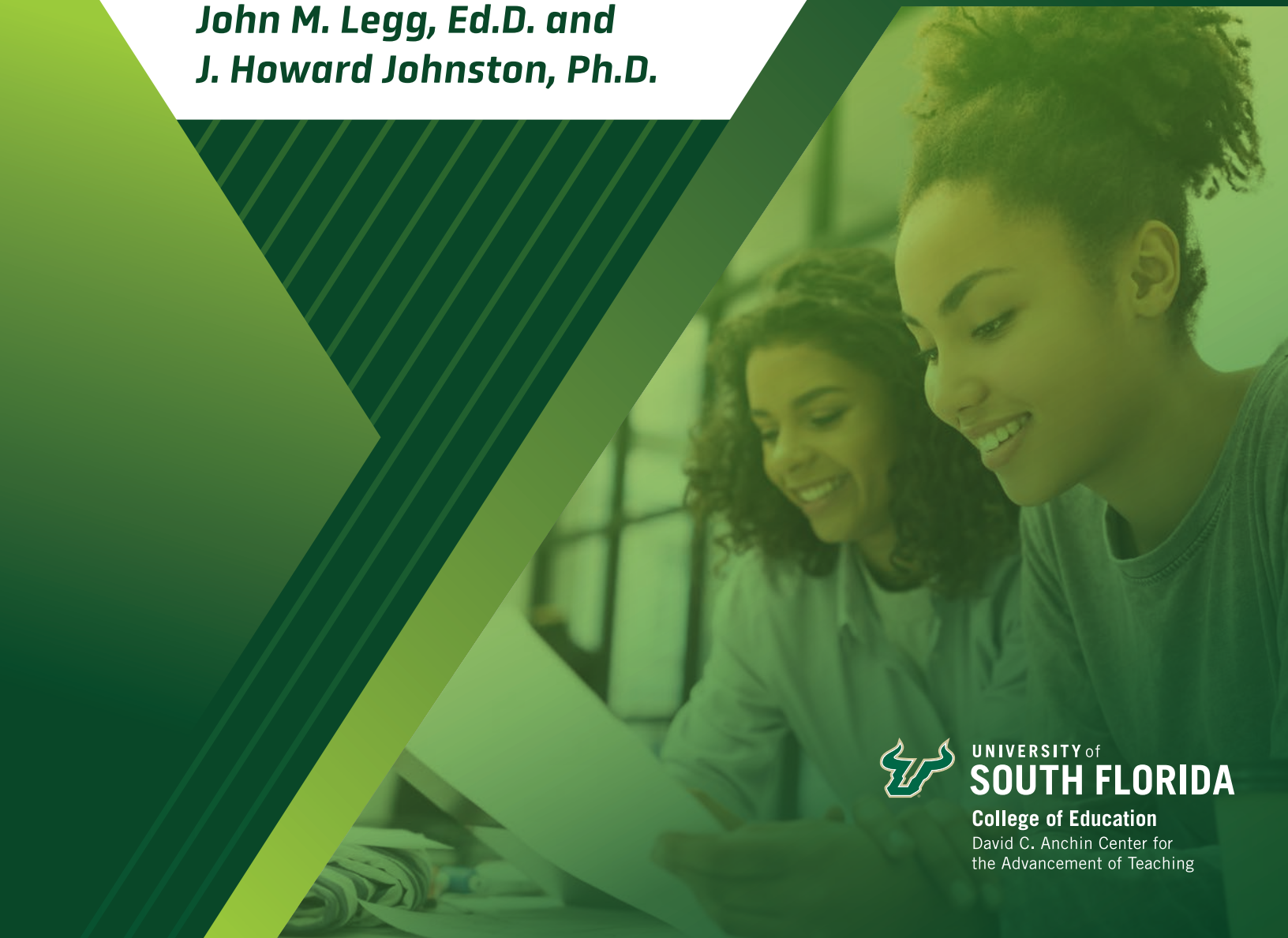
John Matthew Legg
University of South Florida

J. Howard Johnston PhD
University of South Florida, Johnston@usf.edu

CONCURRENT ENROLLMENT AND EARLY COLLEGE:

Assuring Postsecondary Access and Achievement

John M. Legg, Ed.D. and
J. Howard Johnston, Ph.D.



UNIVERSITY of SOUTH FLORIDA
College of Education
David C. Anchin Center for the Advancement of Teaching

The senior year of high school has special social and ceremonial status in American communities. Many schools honor their seniors with special events, more lax regulation and supervision, and lighter academic schedules. These special privileges started back when most students did not either plan for or need to prepare for higher education. It marked the end of their education, not the transition to another phase.

Rather than celebrate, some researchers argue that we should be deeply concerned because this hold-over means that 25 percent of the high school experience is a huge waste of time, opportunity, and money. The reasons for this "wasted senior year" are many [1, 2, 3]: For the vast majority of high school seniors, they have completed their state accountability testing, early college admission decisions have relieved grade pressures, their college admissions testing is finished, and they earned most of the credits they need for graduation 4. As a result, few seniors grow academically, and many regress, resulting in a difficult transition to postsecondary expectations.

The research is pretty clear, however, that students who take a more rigorous high school curriculum have higher educational attainment and earnings [5, 6, 7, 8, 9, 10, 11, 12, 13]. Further, a student's transition to college is enhanced when they are challenged academically, and they are more likely to persist and complete their degrees.

TRANSITION INTO POST-SECONDARY EDUCATION

At a time when high school graduation rates are higher than ever, postsecondary education and training are becoming the new educational baseline [14, 15]. It is associated with higher earnings [16], increased tax revenues [17], lower rates of unemployment and welfare dependency, decreased criminality [16, 18], and even better health and increased longevity [19].

Despite the pay-off, postsecondary completion is a problem—less than half of the class of 2004 earned a college degree within eight years of their high school graduation [20]. Although 3.1 million students graduated from high school in 2010 and were admitted to college, only 68 percent, or 2.1 million, actually enrolled in college the following fall—meaning that nearly one-third "leaked out" of the postsecondary pipeline [21]. Of the 2004 high school graduates who did enroll, nearly 40 percent never completed a higher education credential eight years after high school [20].

Postsecondary completion rates vary widely among student subgroups, so some students are more adversely affected than others. For example, while 81 percent of upper-income high school graduates successfully enter college the following fall,

only 52 percent of lower-income students do so [21]. The result is a stunning disparity in college graduation rates among students of different socioeconomic levels: only 23 percent of students from the lowest income quartile in 2004 had earned a college degree by 2012, whereas 67 percent of students from the highest quartile had done so [20]. Similar gaps exist between White and Black or Hispanic students as well [21].

FOCUS ON CHANGE

For several decades, researchers have investigated new, more specialized school models and the effectiveness of these models 22. Among their most significant findings is that concurrent enrollment or early college is a way to sustain academic challenge, defray the rising cost of higher education, and lessen the time required to complete a postsecondary credential 23. It is now a popular alternative: about one-third of students take college courses while they are in high school. Concurrent enrollment grew 67 percent between 2002 and 2010 to 1.4 million students in the 2010-11 school year and continues to grow 24.

THERE ARE THREE COMMON CATEGORIES OF DUAL OR CONCURRENT ENROLLMENT:

Students attend college classes at a postsecondary institution.

Students attend college classes at their high school taught by a postsecondary instructor.

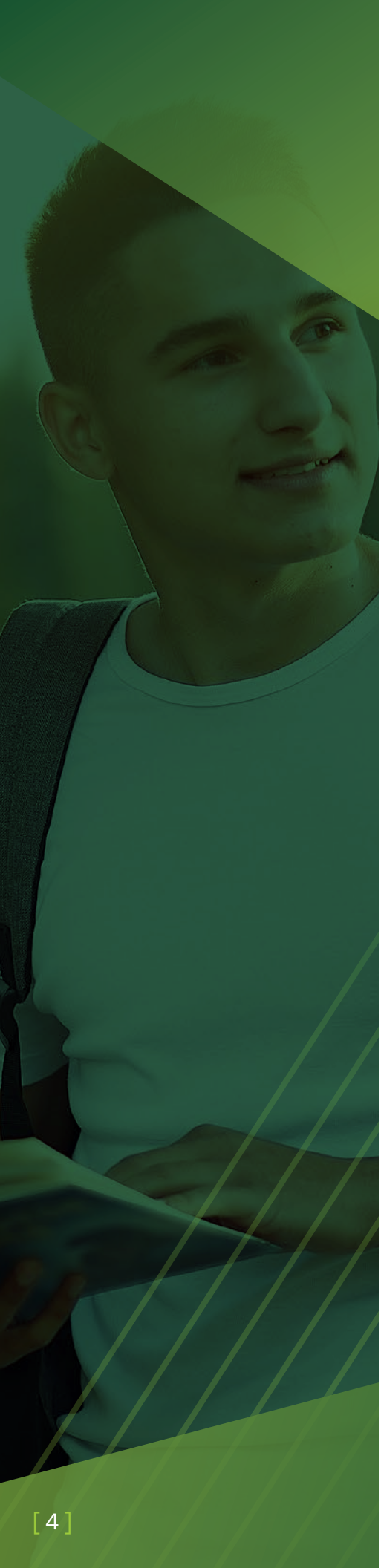
Students attend a college class at their home campus taught by a high school teacher who is certified by the college.

While concurrent programs exist in various forms, they share common characteristics: a focus on degree attainment, college access and enrollment, credit accumulation, high school completion, and improved academic performance in high school and college 25, 26.

Concurrent enrollment programs typically provide a curriculum aligned to satisfy both state high school graduation requirements and general education requirements for an associate's degree. Programs can vary from a single course to a more rigorous four- to five-year model, beginning in eighth or ninth grade and ending with an associate's degree. More often, concurrent enrollment programs consist of a two-year program beginning in 11th grade.

Early college (ECHS) and collegiate (CHS) high schools are a sub-category of concurrent enrollment programs. These programs usually have specific entrance criteria and more structured course requirements. They tend to be formalized and offer support structures such as academic guidance, application, and financial aid assistance, college selection guidance, and college transition support.

College affordability is a significant driver of increased growth in concurrent enrollment programs. Usually, there is no direct cost to the student for concurrent enrollment—the costs of tuition and textbooks are absorbed by the school district, college, or the state. For example, the Texas Legislature has allocated more resources to high schools and postsecondary institutions to



cover concurrent enrollment costs, and Iowa offers a weighted funding formula for school districts that have students completing college-level coursework. Florida statutes require each school district and postsecondary institution to offer collegiate programs and concurrent enrollment through a formal college and school district cost-sharing agreement, and high school students' participation and completion rates are an important component of the state's school grading formula.

Concurrent enrollment programs reduce time-to-degree-completion and the cost of higher education for students, lower the accumulation of students' long-term debt, and reduce costs in state budgets 27, 28, 29, 30. These economic advantages provide particular benefits to economically brittle students during their academic and early-labor market careers 27, 29.

Between 2015-2016 to 2017-2018, annual concurrent enrollment participation in Florida increased by 21,468 students, or 38 percent, to nearly 78,000 students 32. In 2018-2019, 1,851 students graduated with an associate's degree before they were awarded their high school diploma 32. As impressive as Florida's statistics are, they are eclipsed by Texas where concurrent enrollment increased by 285 percent from 64,910 in 2007 to 185,255 in 2019 and represented 10 percent of all higher education enrollment in the state in 2018.

CHALLENGES OF POSTSECONDARY PREPARATION

The College Board reported in 2010 that "there are formidable challenges at every level of the system that confronts students who aspire to enroll and succeed in college" 33, p. 4. One major challenge is post-secondary readiness—ensuring students are prepared to be enrolled and succeed, without remediation, in credit-bearing coursework 34. Peters and Mann argue that these opportunities are not distributed equitably across schools, but that "students from poverty, small schools, and schools with high minority populations need to be provided the same head start on college as students from larger, less diverse, and more affluent high schools" 35, p. 652. Concurrent and dual enrollment programs provide effective "head start" for low-income and minority students.

Students arriving at college are expected to manifest a range of skills and characteristics for success 36, 37. The most frequently referenced are academic skills (writing, critical thinking, analysis, and evaluation), learning skills (time management, note-taking, and the ability to study independently), and psychological attributes (perseverance and the ability to work under pressure 38. These skills often can be cultivated in dual-enrollment programs that also provide mentorship for high school students taking college courses in the more protected environment of their high schools.

While teacher support is critical for building academic success and postsecondary aspirations, it is not the only support system that has shown benefit—peer support is also a successful strategy for improved academic performance for underserved and at-risk students 39. Building cohorts of dual-enrolled students creates achievement-oriented peer groups that can foster academic success and postsecondary ambitions.

OUTCOMES OF CONCURRENT ENROLLMENT

Concurrent enrollment has had a positive effect on postsecondary access, degree attainment, college credit accumulation, and high school completion rates, boosting academic achievement not only for affluent students, but low-income, minority students as well [25, 40]. Specific effects are well-documented in the research literature:

- Taking more rigorous courses in high school increased the chances of low-income, first-generation college students' to enroll in a four-year college. [40, 41]. Further, concurrent enrollment is an effective "gateway" for postsecondary education. Nationally, from 2010 to 2016, 88 percent of former concurrent enrollment students attended postsecondary institutions upon exiting high school; conversely, only 12 percent did not participate in postsecondary education [23].
- There is a significant positive effect on postsecondary graduation rates between early college participants and their non-early college peers, especially among low-income students [23, 25, 40, 42].
- Concurrent enrollment students generally have higher grades in college and persist at greater rates than their traditional peers [43, 44].
- Multiple studies have shown positive effects on college access and enrollment, lowering the cost of college and increasing the likelihood students will enroll in some form of postsecondary education [25, 40, 42, 45, 46, 47].

EARLY COLLEGE AND COLLEGIATE HIGH SCHOOL PROGRAMS

DESPITE THE DIVERSITY OF EARLY COLLEGE HIGH SCHOOLS (ECHS) OR COLLEGIATE HIGH SCHOOL (CHS) PROGRAM MODELS, THEY ALL TAKE INTO ACCOUNT RESEARCH-BASED DESIGN CONSIDERATIONS INCLUDING:

Securing durable high school– college partnerships

Careful sequencing of courses and supports that allow students to progress toward greater independence

Built-in opportunities to gain college knowledge—the knowledge needed to navigate formal and informal college systems

The authenticity of college courses

A focus on key relationships that help students to believe they can succeed in challenging college courses [48, 49, 50]

The best ECHS and CHS programs share common characteristics, all of which are focused on student success: common focus, high expectations, personalized learning, respect and responsibility, performance-based instruction and assessment, and a focus on technology use. Students and educators share a clear common purpose, normally just a few mutually established goals, and all resources, including money, time, and effort, are aligned with the aims of helping students earn college credit and attain a degree.

While all ECHS and CHS students tend to benefit from this laser-like focus, the effects are especially significant for minority and low-income students for whom these programs have been especially successful in helping to boost degree attainment [21, 25, 47].

IMPLICATIONS FOR POLICY AND PRACTICE

Clearly, ECHS and CHS programs provide tremendous benefits for students, their families, and the institutions that provide them. Like any innovation, however, there are variations in the success and quality of these programs.

Both state and institutional policies need to focus on critical components of successful programs:

Recruitment and enrollment. Educational leaders must establish a well-defined and clearly articulated recruitment and enrollment process. Recruitment should not be limited only to those who are deemed academically talented or gifted; rather, recruitment should be available to families where parents or the students themselves determine they can meet the expectations of the concurrent enrollment program.

Expectations. Both academic and social expectations should be made clear. Academic expectations may include level of rigor, course sequences, homework, and college-level performance. Social expectations may include behavior and social responsibility, community service hours that must be fulfilled as a school-level obligation, and any state scholarship requirements for community engagement.

Academics. Course selection should be reviewed with students and parents to assure they satisfy requirements for a high school diploma and the associate's degree. Advanced coursework, overall GPA and credit transferability should be carefully considered.

Social-emotional growth. Professional development for high school instructors should focus on the psycho-social-emotional needs of students in the transition from high school to college, and educational leaders must assure that all high school teachers involved in the program have proper training and credentialing.

Counseling. Well-trained and knowledgeable school counselors well-versed on concurrent enrollment policies and procedures are essential for students to achieve success. The school counselor functions as the students' liaison between the high school and the community college.

Extracurricular activities. Educational leaders should ensure students have access to rich high school-level extracurricular activities to help maintain peer connections and involvement in the high school community. Space should be configured to promote collaboration among concurrent students and be accessible to the school counselor to interact informally with the students.

High school-community college partnership. Constant attention must be devoted to the complexities of blending the resources of two complex organizations—a high school and a community college. A standing workgroup comprised of community college leaders, school district-level leaders, teachers, and principals can help resolve matriculation issues as well as financial, student-related, course registration, and governance questions. It should also review policies and procedures as diverse as accreditation, course prerequisites, grading, free/reduced lunch programs, student behavior, and transportation to name just a few.

ABOUT THE AUTHORS

Dr. John M. Legg is co-founder and Chief Financial Officer of Dayspring Academy, a charter school system in Pasco County, Florida. This brief is based in part on his dissertation.

Dr. Howard Johnston is the Associate Director for Policy at the David C. Anchin Center for the Advancement of Teaching and Professor Emeritus in the College of Education at the University of South Florida.

REFERENCES

1. Center for Teaching Quality. (2007). ***Teaching and learning conditions improve high school reform efforts***. Chapel Hill, NC: North Carolina Business Committee for Education and Center for Teacher Quality.
2. Richardson, T. (2007). Dual-credit: A key to the future. ***On the Horizon, 14***(4), 239-244.
3. Schulz, T. (2007). Pathways to postsecondary: Indiana career majors. ***Techniques: Connecting Education & Careers, 82***(1), 20-22.
4. Andrews, H. A. (2010). Dual credit research outcomes for students. ***Community College Journal of Research and Practice***, ***28***(5), 415-422. doi:10.1080/1066892049044445
5. Adelman, C. (1999). Answers in the toolbox: Academic intensity, attendance patterns,
6. and bachelor's degree attainment (No. PLLI-199-8021). Washington, D.C.: National
7. Institute on Postsecondary Education, Libraries, and Lifelong Learning. Retrieved from https://www2.ed.gov/pubs/Toolbox/index.html
8. Adelman, C. (2006). The toolbox revisited: Paths to degree completion from high school through college. Washington, D.C.: U.S. Department of Education. Retrieved from https://www2.ed.gov/rschstat/research/pubs/toolboxrevisit/index.html
9. Allensworth, E., Nomi, T., Montgomery, N., & Lee, V. E. (2009). College preparatory curriculum for all: Academic consequences of requiring Algebra and English I for ninth graders in Chicago. ***Educational Evaluation and Policy Analysis***, ***31***(4), 367-391. doi:10.3102/0162373709343471
10. Attewell, P., & Domina, T. (2008). Raising the bar: Curricular intensity and academic performance. ***Educational Evaluation and Policy Analysis, 30***(1), 51-71. doi:10.3102/0162373707313409
11. Aughinbaugh, A. (2012). The effects of high school math curriculum on college attendance: Evidence from the NLSY97. ***Economics of Education Review, 31***(6), 861-870. doi:10.1016/j.econedurev.2012.06.004
12. Long, M. C., Conger, D., & Iatarola, P. (2012). Effects of high school course-taking on secondary and postsecondary success. ***American Educational Research Journal, 49***(2), 285-322. doi:10.3102/0002831211431952
13. Morgan, R., & Klaric, J. (2007). ***AP students in college: An analysis of five-year academic careers*** (No. 2007-4). New York, NY: College Board. Retrieved from ERIC Document Reproduction Services. (ED561034)
14. Rose, H., & Betts, J. R. (2004). The effect of high school courses on earnings. ***Review of Economics and Statistics, 86***(2), 497-513. doi:10.1162/003465304323031076
15. Speroni, C. (2011). ***Determinants of students' success: The role of advanced placement and dual enrollment programs.*** New York, NY: National Center for Postsecondary Research.
16. Carnevale, A. P., Hanson, A., & Gulish, A. (2013). ***Failure to launch: Structural shift and the new lost generation.*** Washington, D.C.: Georgetown University Center on Education and the Workforce.

17. U.S. Department of Education. (2004). High schools with high expectations for all (Issue Paper: The High School Leadership Summit). Washington, D.C.: Author.

18. Baum, S., Ma, J., & Payea, K. (2010). ***Education pays: The benefits of higher education for individuals and society.*** New York, NY: The College Board Advocacy and Policy Center.

19. Rouse, C. E. (2007). Consequences for the labor market. In C. Belfield & H. M. Levin (Eds.), The price we pay: Economic and social consequences of inadequate education (pp. 99–124). Washington, DC: Brookings Institution Press

20. Belfield, C. R., & Bailey, T. (2011). The benefits of attending community college: A review of the evidence. ***Community College Review***, ***39***(1), 46–68. doi:10.1177/0091552110395575

21. Hummer, R. A. & Hernandez, E. M. (June, 2013). The effect of educational attainment on adult mortality in the United States. ***Population Bulletin,*** 68(1).

22. Lauff, E., & Ingels, S. J. (2014). ***Education longitudinal study of 2002 (ELS:2002): A first look at 2002 high school sophomores 10 years later*** (NCES 2014–363).Washington, D.C.: National Center for Education Statistics, U.S. Department of Education. Retrieved from http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2014363

23. Aud, S., Wilkinson–Flicker, S., Kristapovich, P., Rathbun, A., Wang, X., & Zhang, J. (2013). ***The condition of education 2013*** (NCES 2013–037). Washington, D.C.: National Center for Education Statistics, U.S. Department of Education. Retrieved from http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2013037

24. Thompson, C., & Ongaga, K. (2011). Flying the plane while we build it: Case study of an early college high school. ***The High School Journal***, ***94***(2), 43–57. doi:10.1353/hsj.2011.0000

25. Fink, J., & Jenkins, D., & Yanagiura, T. (2017). ***What happens students who take community college "dual enrollment" courses in high school?*** Teachers College Colombia University. Retrieved from https://ccrc.tc.columbia.edu/publications/what–happens–community–college–dual–enrollment–students.html

26. Institute for Educational Sciences/National Center for Educational Statistics (IES/NCES) (May, 2020). Public high school graduation rates. ***The Condition of Education***. Washington: Author. Retrieved from https://nces.ed.gov/programs/coe/indicator_coi.asp#:~:text=(Last%20Updated%3A%20May%202020),first%20measured%20in%202010%E2%80%9311.

27. Berger, A., Turk–Bicakci, L., Garet, M., Song, M., Knudson, J., Haxton, C., … Cassidy, L. (2013). ***Early college, early success: Early college high school initiative impact study***. Washington, D.C.: American Institutes for Research. Retrieved from https://www.air.org/resource/early–college–early–success–early–college–high–school–initiative–impact–study–2013

28. Rochford, J. A. (2011). ***Point of proof: A template for evaluating early college high schools and demonstrating their value to the community***. Canton, OH: Stark Education Partnership. Retrieved from http://www.edpartner.org/pdfs/Point_of_Proof.pdf

29. Haskell, R. E. (2016). The effects of dual–credit enrollment on underrepresented students: The Utah case. International Journal of Economics and Finance, 8(1),144–175.

30. Appleby, J., Ashton, K., Ferrell, J., Gesing, E., Jackson, S., Lindner, T., … Wu, Y. (2011). ***A study of dual credit access and effectiveness in the State of Texas***. College Station, TX: Texas A&M. Retrieved from https://oaktrust.library.tamu.edu/handle/1969.1/152074

31. Rothstein, J., & Rouse, C. E. (2011). Constrained after college: Student loans and early career occupational choice. ***Journal of Public Economics***, ***95***(1–2), 149–163. doi:10.1016/j.jpubeco.2010.09.015

32. Swanson, J. L. (2008). ***An analysis of the impact of high school dual enrollment course participation on post secondary academic success, persistence and degree completion***. Doctoral Dissertation. University of Iowa. Retrieved from http://nacep.org/wp-content/uploads/2010/02/Dissertation-2008-Joni-L.-Swanson.pdf

33. Taylor, J. L. (2015). Accelerating pathways to college: the (in)equitable effects of community college dual credit. ***Community College Review***. Retrieved from http://crconsortium.com/wp-content/uploads/2018/08/Taylor-2015-Dual-Credit-Equity.pdf

34. Florida Department of Education. (2019). Community college and technical center management information systems (CCTCMIS). Retrieved from http://www.fldoe.org/accountability/data-sys/CCTCMIS/

35. College Board. (2010). ***The college completion: Agenda state policy guide.*** The National Council of State Legislatures. Retrieved from http://www.ncsl.org/documents/educ/policyguide_062810sm.pdf

36. Barnes, W., & Slate, J. R. (2010, August). College-readiness: The current state of affairs. Paper presented at the National Council of Professors of Educational Administration Annual Conference, Washington, D.C.

37. Peters, S. J., & Mann, R. L. (2009). Getting ahead: Current secondary and postsecondary acceleration options for high-ability students in Indiana. ***Journal of Advanced Academics, 20***(4), 630–660. doi:10.1177/1932202X0902000404

38. Conley, D. T. (2010). ***College and career ready: Helping all students succeed beyond high school***. San Francisco, CA: Jossey-Bass.

39. Roderick, M., Nagoaka, J., Coca, V., & Moeller, E. (2009). ***From high school to the future: Making hard work pay off. The road to college for students in CPS's academically advanced programs.*** Chicago, IL: Consortium on Chicago School Research, University of Chicago. Retrieved from https://consortium.uchicago.edu/publications/high-school-future-making-hard-work-pay

40. Shaw, S. D. & Werno, M. A. (November, 2016). Preparing for college success: Exploring the impact of the high school Cambridge acceleration program on U. S. university students. ***College and University***, 91(4), 2–18. Retrieved from https://www.aacrao.org/research-publications/quarterly-journals/college-university-journal/article/c-u-archive/c-u-vol.-91-no.-4-fall-2016-(.pdf)

41. Pathways to College Network. (2007). Social support: An essential ingredient to college success**.** Retrieved December 15, 2018 from http://www.adlit.org/article/32509/

42. Edmunds, J., Unlu, F., Glennie, E., Bernstein, L., Fesler, L., Furey, J., & Arshavsky, N. (2017). Smoothing the transition to postsecondary education: The impact of the early college model. ***Journal of Research on Educational Effectiveness***, ***10***(2), 297–325. doi:10.1080/19345747.2016.1191574

43. Engle, J., & Tinto, V. (2008). ***Moving beyond access: College success for low income, first-generation students***. Washington, D.C.: The Pell Institute for the Study of Opportunity in Higher Education. Retrieved from http://www.pellinstitute.org/publicationsMoving_Beyond_Access_2008.shtml

44. Giani, M., Alexander, C., & Reyes, P. (2014). Exploring variation in the impact of dual-credit coursework on postsecondary outcomes: A quasi-experimental analysis of Texas students. ***High School Journal, 97***(4), 200-218.

45. Allen, D., & Dadgar, M. (2012). Does dual enrollment increase students' success in college? Evidence from a quasi-experimental analysis of dual enrollment in New York City. ***New Directions for Higher Education,*** (158), 11-19. doi:10.1002/he.20010

46. Karp, M., & Hughes, K. (2007). ***Dual enrollment can benefit a broad range of students***. New York, NY: Community College Research Center, Columbia University.

47. Dynarski, S. (2003). Does aid matter? Measuring the effect of student aid on college attendance and completion. ***The American Economic Review, 93***(1), 279-288. Retrieved from https://www.jstor.org/stable/3132174

48. van der Klaauw, W. (2002). Estimating the effect of financial aid offers on college enrollment: A regression-discontinuity approach. ***International Economic Review***, ***43***(4), 1249-1287. doi:10.1111/1468-2354.t01-1-00055

49. Struhl, B., & Vargas, J. (2012). ***Taking college courses in high school: A strategy guide for college readiness: The college outcomes of dual enrollment in Texas***. Washington, D.C.: Jobs for the Future.

50. Barnett, E. A., Bucceri, K., Hindo, C., & Kim, J. E. (2013). ***Ten key decisions in creating early colleges design option based on research.*** New York, NY: Columbia University. doi:10.7916/D8BR8RKG

51. Barnett, E. A., Fay, M. P., Bork, R. H., & Trimble, M. J. (2013***). Reshaping the college transition: States that offer early college readiness assessments and transition curricula.*** New York, NY: Columbia University. Retrieved from https://ccrc.tc.columbia.edu/publications/reshaping-the-college-transition-state-scan.html

52. Barnett, E. A., Maclustky, E., & Wagonlander, C. (2015). Emerging early college models for traditionally underserved students. ***New Directions for Community Colleges***, (169), 39-49. doi:10.1002/cc.20131

UNIVERSITY of
SOUTH FLORIDA

College of Education

David C. Anchin Center for
the Advancement of Teaching