

Advancing Community College Practices: Insights from Research



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Student Success and Completion

Belfield, C. R., Jenkins, D., & Fink, J. (2019). **Early momentum metrics: Leading indicators for community college improvement.** *CCRC Research Brief. Community College Research Center, Teachers College, Columbia University.*

- **Predictive Nature of Early Momentum Metrics:** The report demonstrates that nine measures of students' progress in their first year effectively predict student completion in subsequent years. These early momentum metrics serve as reliable indicators of the long-term effectiveness of institutional reforms aimed at improving student success.
- **Three Key Measures of Early Academic Momentum:** The authors identify three critical measures of early academic momentum that can be used to gauge the impact of institutional reforms on student outcomes:
 - **Credit momentum:** Defined as attempting at least 15 semester credits in the first term or 30 semester credits in the first academic year.
 - **Gateway momentum:** Defined as taking and passing pathway-appropriate college-level math and college-level English in the first academic year.
 - **Program momentum:** Defined as taking and passing at least nine semester credits in the student's field of study in the first academic year.
- **Impact on Completion Rates and Equity Gaps:** The analysis of student data from all community colleges in three states reveals that many students do not gain early momentum in their first year, contributing to low completion rates and equity gaps in completion rates. The findings suggest that college outcomes would be substantially higher if more students met early momentum metrics, indicating a need for comprehensive reforms in community college organization and practices.

Pechac, S., & Slantcheva-Durst, S. (2021). **Coaching toward completion: Academic coaching factors influencing community college student success.** *Journal of College Student Retention: Research, Theory & Practice, 23(3), 722-746.*

- **Influence of Coaching on Student Persistence:** The study examined the impact of specific coaching factors such as frequency, nature, and contact modes on the persistence of community college students.
- **Data Analysis from Midwest Community Colleges:** Using data from 5,808 students across 15 Midwest community colleges, the study found that 31.5% of the variance in credit-hour completion could be explained by 17 factors related to student demographics, community college characteristics, and coaching factors.
- **Coaching as a Promising Practice:** The research underscores coaching in higher education as a promising practice for student support, aligning with the American Association of Community College's 21st Century Initiative for community college completion.

Course Placement

Perkins, M. A., Carrier, J. W., & Schaffer, J. M. (2023). **Predictability of high school GPA on community college GPA and math and English course success for nontraditionally aged students.** *Journal of Applied Research in the Community College*, 30(2), 17-32.

- **Study Focus:** Examined the impact of high school GPA on community college GPA and success in college-level math and English courses for nontraditionally aged students, using path analysis.
- **Key Finding:** High school GPA's predictability for academic success in community college decreases as students age.
- **Recommendation:** Suggested alternative placement strategies, like corequisite education and guided self-placement, for nontraditional community college students.

Coleman, D. R., & Smith, D. A. (2021). **Beyond predictive validity: A mixed method study of self-directed developmental education placement at a small community college.** *Community College Journal of Research and Practice*, 45(6), 403-422.

- **Challenges in Course Placement:** Colleges struggle with finding the most appropriate methods for placing students in math and English courses. The common use of single high-stakes standardized placement exams with strict cut-scores has been questioned for its accuracy in student placement.
- **Self-Directed Placement (SDP) Policies:** A growing number of colleges are adopting SDP policies, which involve a self-assessment tool for students to reflect on their own content-related practices, abilities, and beliefs. This study explored the implementation of SDP at a small community college as part of a broader multiple measures placement process.
- **Recommendations and Shift in Focus:** The study recommends ensuring SDP tools reflect the specific skills and knowledge needed for college-level courses at each institution. It also suggests adopting a holistic approach to student self-assessment. The findings highlight the need to shift from focusing solely on predictive validity towards a more comprehensive, holistic consideration of both qualitative and quantitative validity evidence in placement methods.

Math Remediation and Success

Ngo, F. (2019). **Fractions in college: How basic math remediation impacts community college students.** *Research in Higher Education*, 60, 485-520.

- **Identification of Critical Skills:** The study identified procedural fluency with fractions and the ability to solve word problems as the key skills most commonly inhibiting student access to higher-level math courses.
- **Impact of Missing Skill Cutoffs:** Students who just missed the skill cutoffs for fractions, leading them to start college in a lower-level math course, experienced negative effects on their college persistence and attainment.
- **Reevaluation of Math Expectations:** The findings suggest a need to reconsider the specific math expectations that regulate access to college math coursework, as missing certain skill cutoffs, particularly in fractions, had more significant impacts compared to others.

Ngo, F. J., & Velasquez, D. (2020). **Inside the math trap: Chronic math tracking from high school to community college.** *Urban Education*, 0042085920908912.

- **Identification of 'Math Traps':** The study identifies the phenomenon of "math traps," where students experience stifled mobility and chronic repetition of math coursework during their transition from high school to college. This limited math mobility and rampant repetition of math courses significantly hinder students' academic progress.
- **Factors Influencing the Probability of Math Traps:** The study provides evidence that certain factors are associated with increased probabilities of students being in a math trap. Notably, the likelihood of being

trapped in these math courses varies among different colleges. Additionally, a lower GPA and initial community college math placement level are negatively associated with the likelihood of being trapped in math courses .

- **Link Between Math Tracking and Repetition:** The study found that once students enter a tracking system, their mathematics mobility is limited. This tracking system leads to the significant repetition of mathematics courses, which is closely linked to the math traps that students struggle to escape.

Totonchi, D. A., Francis, M. K., Tibbetts, Y., Huelskoetter, E., Davis, J., Smith, A., Barron, K.E., & Hulleman, C. S. (2023). **Improving community college students' success in math: Findings from two utility-value studies.** *The Journal of Experimental Education*, 1-24.

- **Enhanced Perceived Math Relevance and Achievement:** The utility-value intervention significantly improved students' perceived relevance of math and their achievement in introductory math courses.
- **Benefit to First-Generation and Racially Marginalized Students:** The intervention was particularly effective for first-generation and racially marginalized students, enhancing their academic experiences and outcomes.
- **Potential for Improving Student Motivation and Retention:** The findings imply that community colleges could significantly enhance students' academic experiences and retention rates by investing in motivation-enhancing activities, such as utility-value interventions, especially in introductory math courses.

Transfer

Schudde, L., Jabbar, H., & Hartman, C. (2021). **How political and ecological contexts shape community college transfer.** *Sociology of Education*, 94(1), 65-83.

- **Influence of University Personnel:** University administrators, faculty, and staff significantly influence the community college transfer process by setting the rules and norms for credit transfer and applicability.
- **Challenges for Students in Information Gathering:** Community college students, possessing the least privilege, must invest substantial effort in gathering information about transfer pathways and policies.
- **Systematic Disadvantages for Community College Students:** The transfer information structure, being complex and institution-specific, systematically disadvantages community college students, with minimal collaboration and alignment between institutions.

Umbach, P. D., Tuchmayer, J. B., Clayton, A. B., & Smith, K. N. (2019). **Transfer student success: Exploring community college, university, and individual predictors.** *Community College Journal of Research and Practice*, 43(9), 599-617.

- **Institutional Size and Location:** Attendance at a large community college and proximity to a public university positively influences student success post-transfer.
- **University Size Impact:** Larger university size is negatively associated with first-year grades and second-year persistence for transfer students.
- **HBCU Positive Influence:** Transferring to a Historically Black College or University (HBCU) is positively correlated with higher GPA, persistence in college, and degree completion for transfer students.

Fay, M. P., Jaggars, S. S., & Farakish, N. (2022). **"Lost in the Shuffle": How relationships and personalized advisement shape transfer aspirations and outcomes for community college students.** *Community College Review*, 50(4), 366-390.

- **Significance of Personalized Advisement and Relationships:** The study highlights the crucial role of personalized advisement and relationships with transfer advisors in shaping community college students' transfer plans and outcomes. Personalized advising appears to contribute significantly to higher rates of transfer to four-year institutions, especially for traditionally underserved student populations.

- **Comparative Analysis of Advising Approaches:** The research compares the outcomes of students who received personalized transfer advising through a community college honors program with those of similarly qualified peers who received standard ("business as usual") advising. This comparison provides insights into the effectiveness of more dedicated and personalized advisement methods.
- **Impact on Transfer Destinations:** The study suggests that personalized advisement and strong relationships with advisors not only increase the likelihood of transfer but also may support transfer to more selective four-year institutions. This finding indicates that the quality of advising received by community college students can influence not just their decision to transfer but also the caliber of the institutions to which they successfully transfer.

Zhang, Y. L. (2022). **Early academic momentum: Factors contributing to community college transfer students' STEM degree attainment.** *Journal of College Student Retention: Research, Theory & Practice*, 23(4), 873-902.

- **Background Characteristics:** Gender, age, and family income significantly impact the likelihood of community college transfer students obtaining a STEM degree.
- **Community College Academic Achievement:** Achievements like associate degree completion and the number of community college credits accepted are crucial factors.
- **Early Academic Performance:** Preparedness in math and English, the number of credit hours attempted, and first-semester GPA at the four-year university are key predictors of success in STEM fields for transfer students

Hyatt, S. E., & Smith, D. A. (2020). **Faculty perceptions of community college transfer students: The private university experience.** *Community College Journal of Research and Practice*, 44(6), 395-411.

- **Alignment of Expectations:** There is a need for balancing and aligning faculty and student expectations in the context of community college transfer students at private universities.
- **Complex Perceptions:** Faculty often perceive community college transfer students as complicated, indicating nuanced understandings or stereotypes.
- **Reluctance to Seek Help:** Community college transfer students tend not to seek help from faculty, which may impact their academic integration and success.
- **Unawareness of Services:** Both faculty and students show a lack of awareness regarding services and transfer processes, potentially hindering the transition and support available to transfer students.

Maliszewski Lukszo, C., & Hayes, S. (2020). **Facilitating transfer student success: Exploring sources of transfer student capital.** *Community College Review*, 48(1), 31-54.

- **Family and Peers as Primary Sources:** Family and peers are the most common sources for students to gain Transfer Student Capital (TSC) to navigate the transfer process.
- **High School's Critical Role:** High schools play a crucial role in providing critical transfer information to students.
- **Transfer Advisors and Faculty's Role in Self-Efficacy:** Transfer advisors and faculty at community colleges or 4-year colleges provide important transfer information and play a critical role in building students' self-efficacy for transfer, rather than merely transmitting information.

Dual/Concurrent Enrollment

Xu, D., Solanki, S., & Fink, J. (2021). **College acceleration for all? Mapping racial gaps in Advanced Placement and dual enrollment participation.** *American Educational Research Journal*, 58(5), 954-992.

- **Racial Gaps in AP and DE Programs:** There are significant racial gaps in enrollment in Advanced Placement (AP) and dual enrollment (DE) programs across school districts in the United States. These gaps are more pronounced in AP programs compared to DE programs. Specifically, the average district white-black gap in

AP participation is more than twice as large as the white-black gap in DE participation. For white-Hispanic gaps, the average district had gaps of 6.9 and 4.2 percentage points for AP and DE, respectively .

- **Predictors of Racial Gaps:** Differences in pre-high school achievement gaps between white and minority students are the strongest predictors of racial gaps in AP and DE participation. Controlling for these achievement gaps significantly reduces, and almost eliminates, the racial disparities in participation in AP and DE programs .
- **Influence of Resources and Policies:** District-level resources and state policies that facilitate greater access to AP and DE programs are linked to wider racial enrollment gaps. This suggests that increased resources and access to these programs may unintentionally exacerbate racial disparities if not paired with adequate efforts to ensure equitable access and support for minority students.

Hemelt, S. W., Schwartz, N. L., & Dynarski, S. M. (2020). **Dual-credit courses and the road to college: Experimental evidence from Tennessee.** *Journal of Policy Analysis and Management*, 39(3), 686-719.

- **Impact on High School Math Course-Taking:** The introduction of a dual-credit advanced algebra course influenced students' subsequent high school math course choices. It led to a decrease in enrollment in remedial math courses and an increase in enrollment in precalculus and Advanced Placement math courses.
- **College Enrollment Choices:** While the dual-credit course did not significantly affect overall rates of college enrollment, it did influence the type of institutions students chose. The course encouraged some students, especially those in the middle of the math achievement distribution and those first exposed to the course in eleventh grade, to opt for four-year universities over two-year colleges.
- **Early College Math Performance:** There was limited evidence of improvements in early math performance during college as a result of the dual-credit course.

Clayton, G., Faria, A., & Witkowsky, P. (2023). **Concurrent enrollment outcomes by course location.** *Community College Journal of Research and Practice*, 1-16.

- **Comparison of CE Outcomes by Location:** The study compared initial outcomes of students who took concurrent enrollment (CE) courses at their high school with those who took them at a local college.
- **Methodology and Demographics:** The research utilized data from Colorado, covering all concurrent enrollment students in the state from 2012 to 2016, and employed propensity score matching to create comparable groups for analysis.
- **Grades and Credit Hours:** The results indicated that there were no statistically significant differences in GPA or credit hours earned between the matched groups at any evaluated time point, suggesting similar academic outcomes regardless of the course location.

Career Technical Education

Sublett, C., & Tovar, J. (2021). **Community college career and technical education and labor market projections: A national study of alignment.** *Community College Review*, 49(2), 177-201.

- **Alignment with Market Projections:** There was no clear correlation between community college students' choice of Career and Technical Education (CTE) majors and labor market projections.
- **Negative Association with High Remuneration Fields:** Choosing majors in high remuneration CTE areas, like Information Technology and STEM, showed a negative association with projected market growth in students' home states.
- **Community College Role in Local Labor Shortages:** Community colleges are well-suited to provide CTE coursework to respond to local labor shortages, but it's unclear to what extent students choose CTE majors based on labor market projections in these fields

Gauthier, T. (2020). **A renewed examination of the stigma associated with community college career and technical education.** *Community College Journal of Research and Practice*, 44(10-12), 870-884.

- **Perception of CTE Programs:** Community college Career and Technical Education (CTE) programs remain stigmatized, perceived as being suited for less able students.
- **Contribution to Demoralization in Higher Education:** These stigmatized perceptions of CTE programs contribute to the demoralization of higher education.
- **Implicit Contribution of Community Colleges to Stigmatization:** Community colleges, in their efforts to organize and support students, inadvertently contribute to the stigmatization of career and technical education.

Basic Needs Insecurity

Ilieva, R. T., Ahmed, T., & Yan, A. (2019). **Hungry minds: Investigating the food insecurity of minority community college students.** *Journal of Public Affairs*, 19(3), e1891.

- **Prevalence of Food Insecurity:** The study found high levels of food insecurity among the participants, who were low-income minority students at an urban community college.
- **Impact on Academic Performance:** Students reported that food insecurity impacted their ability to concentrate on academic tasks, suggesting a direct link between access to food and academic success.
- **Institutional Trust and Policy Implications:** The students' narratives expressed a desire for more affordable and appealing food options on campus, indicating distrust towards the college institution. This highlights the need for colleges to reevaluate their food policies and the messages they send to food-insecure students.

Baugus, K. E. (2019). **Food insecurity, inadequate childcare, & transportation disadvantage: student retention and persistence of community college students.** *Community College Journal of Research and Practice*.

- **Supportive Services Impact Retention:** Engagement in supportive services on campus, such as food pantry, transportation, and childcare, has been linked to higher retention rates of college students.
- **Jefferson Community School Program:** This program at a rural campus in Northern New York was designed to meet non-academic needs and included food pantry, transportation, and childcare services at no cost to enrolled students.
- **Equalizing Chances for Low-Income Students:** Providing non-academic resources to low-income students may help equalize their chances of being retained or persisting in their studies when compared to peers with more resources.

Sallee, M. W., & Cox, R. D. (2019). **Thinking beyond childcare: Supporting community college student-parents.** *American Journal of Education*, 125(4), 621-645.

- **Significant Student-Parent Population:** Student-parents form a considerable portion of the student body in community colleges across the United States and Canada.
- **Navigating Multiple Responsibilities:** These student-parents face substantial challenges balancing academic, financial, and family responsibilities.
- **Access to Campus Resources and Persistence:** The study examines the extent to which student-parents can access campus-based resources to support their persistence and highlights the organizational barriers they encounter in care-blind campus environments

Student Mental Health

Lipson, S., Lattie, E., & Eisenberg, D. (2019). **Increased rates of mental health service utilization by u.s. college students: 10-year population-level trends (2007–2017).** *Psychiatric Services*, 70(1), 60-63.

- **Increased Treatment Rates:** The rate of mental health treatment among U.S. college students significantly increased from 19% in 2007 to 34% by 2017.

- **Rise in Lifetime Diagnoses and Mental Health Issues:** There was a notable increase in the percentage of students with lifetime mental health diagnoses, from 22% to 36% within the same period. Concurrently, the prevalence of depression and suicidality among students also showed an upward trend.
- **Growing Concern of Suicidal Ideation:** The proportion of students with a positive Patient Health Questionnaire-2 (PHQ-2) score, indicative of depressive symptoms, rose from 24.8% in 2009 to 29.9% in 2016–2017. Suicidal ideation among students steadily increased, from 5.8% in 2007 to 10.8% in 2016–2017

Lipson, S. K., Phillips, M. V., Winqvist, N., Eisenberg, D., & Lattie, E. G. (2021). **Mental health conditions among community college students: a national study of prevalence and use of treatment services.** *Psychiatric services, 72*(10), 1126-1133.

- **High Prevalence of Mental Health Problems:** Over 50% of both community college and 4-year university students met the criteria for one or more mental health issues.
- **Higher Prevalence Among Younger Community College Students:** Community college students aged 18-22 years showed a significantly higher prevalence of mental health issues compared to their same-age peers at 4-year institutions.
- **Service Utilization and Barriers:** Community college students, especially from marginalized backgrounds, were less likely to use mental health services compared to 4-year university students. Financial stress was identified as a major predictor of mental health outcomes, with cost being the most significant barrier to treatment for community college students

Broton, K. M., Mohebali, M., & Lingo, M. D. (2022). **Basic needs insecurity and mental health: Community college students' dual challenges and use of social support.** *Community College Review, 50*(4), 456-482.

- **Increased Mental Health Problems with Basic Needs Insecurity:** Students facing basic needs insecurity (such as issues with food and housing) are significantly more likely to experience mental health issues such as depression, anxiety, and suicidal ideation, planning, or attempt, compared to their materially secure peers.
- **Severity of Material Hardship:** The study found that the likelihood of reporting mental health problems is positively associated with the severity of material hardship. Students with both food and housing insecurities report even higher rates of mental health problems.
- **Reliance on Social Support and its Limitations:** Community college students often rely on friends or family for emotional and mental support due to limited institutional support. While the receipt of social support is higher among those with mental health challenges, it varies based on the students' basic needs security status. This indicates that students with both basic needs insecurity and mental health problems might have exhausted these social support resources.

"Free" Community College Programs

Smith, D.A., Cain, C.M. and Friedel, J.N. (2023), **Free college: Budgets, mission, and the future.** *New Directions for Community Colleges, 2023.*

- **Overview of College Promise Programs:** This volume offers a comprehensive review of college promise programs in the U.S., discussing their definition, funding, and structure. It includes analyses of different funding sources for statewide programs and emphasizes the importance of financial sustainability and adaptability.
- **Program Elements and Case Studies:** The volume explores critical elements like tuition coverage and wraparound services, presenting varied examples from rural and urban contexts. It features case studies on the outcomes and insights of various free college and college-esque programs, including their success, challenges, and recommendations for improvement.

- **Future Implications and Equity Considerations:** The final section addresses the future implications of free college programs in terms of economic development and equity. It examines policy reforms, the role of career and technical education, and how promise programs can address racial inequality to support more equitable access to higher education.

Bell, E. (2021). **Does free community college improve student outcomes? Evidence from a regression discontinuity design.** *Educational Evaluation and Policy Analysis*, 43(2), 329-350.

- **Increased Transfer to 4-Year Colleges:** Tulsa Achieves significantly increased the likelihood of students transferring to four-year colleges, with an increase of 13 to 14 percentage points.
- **Enhanced Bachelor's Degree Attainment:** The program also led to an approximate increase of 2 percentage points in bachelor's degree attainment among participants.
- **Mixed Impact on Other Outcomes:** While the program appeared to increase college GPA, it had no significant effect on credit accumulation, retention, and graduation rates from Tulsa Community College.

Gurantz, O. (2020). **What does free community college buy? Early impacts from the Oregon Promise.** *Journal of Policy Analysis and Management*, 39(1), 11-35.

- **Enrollment Shift in First Year:** In the first year of the Oregon Promise program, there was an observed shift in enrollment from four-year colleges to community colleges.
- **Increase in Overall Postsecondary Enrollment in Second Year:** By the second year of the program, the Oregon Promise predominantly increased overall postsecondary enrollment, rather than just shifting students from four-year institutions.
- **Increase in Community College Enrollment:** The implementation of the Oregon Promise led to an increase in enrollment at two-year colleges by approximately four to five percentage points for the first two eligible cohorts.

Acton, R. (2021). **Effects of reduced community college tuition on college choices and degree completion.** *Education Finance and Policy*, 16(3), 388-417.

- **Increase in Local Community College Enrollment:** Reducing tuition at a student's local community college by \$1,000 leads to an 18% increase in enrollment at the college, corresponding to a rise of 3.5 percentage points.
- **Decrease in Enrollment at Other Institutions:** This reduction in local community college tuition also results in a decrease in enrollment at non-local community colleges, for-profit institutions, and other private, vocationally focused colleges by 1.9 percentage points (15 percent).
- **Positive Impact on College Persistence and Completion:** The shift in enrollment choices, prompted by reduced tuition rates, enhances students' persistence in college, credit completion, and the likelihood of transferring to and earning bachelor's degrees from four-year colleges.

Research Resources

Sample peer-reviewed journals:

Community College Journal of Research and Practice
Community College Review (peer-reviewed journal, not the blog of the same name)
Journal of Applied Research in the Community College
Journal of College Student Development
Journal of Diversity in Higher Education
Journal of Higher Education
Journal of Hispanic Higher Education
Journal of the First-Year Experience & Students in Transition
Journal of Student Affairs Research and Practice
NASPA Journal
New Directions for Community Colleges
New Directions for Adult and Continuing Education
New Directions for...(multiple with varying emphases: Higher Education; Student Services; etc)
Research in Higher Education
The Review of Higher Education
This is not an exhaustive list.

Helpful resources for literature, research, and current topics:

American Council on Education: <http://www.acenet.edu/Pages/default.aspx>

American Association of Community Colleges: <https://www.aacc.nche.edu/>

Association of Community College Trustees: <https://www.acct.org/>

American Association of State Colleges & Universities: <https://aascu.org/>

Community College Research Center (CCRC): <http://ccrc.tc.columbia.edu>

Education Commission of the States: <https://www.ecs.org>

Iowa Department of Education: <https://www.educateiowa.gov>

IDOE - Community Colleges: <https://educateiowa.gov/adult-career-comm-college/adult-career-and-community-college>

National Institute for (CC) Staff and Organizational Development: <http://www.nisod.org>

NASPA (Student Affairs Administrators in Higher Education): <https://www.naspa.org>

The League for Innovation in the Community College: <https://www.league.org>

Free Daily or Weekly News Updates Impacting Higher Education

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- Inside Higher Ed
- The Chronicle of Higher Education
- ACCT newsletter
- AACC newsletter – Community College Daily
- American Council for Education
- Education Dive: Higher Education
- Educause Review
- Eduwire Daily Update
- Daily Lumina News
- University Business Daily
- Edweek Update
- Innovation Daily
- Gallup News
- Education Commission of the States
- ccnewsnow.com
- ecampusnews.com
- SHEEO Policy Headlines
- NISOD Weekly Digest