Commonwealth of Virginia September 11, 2017

Report to the Governor and the General Assembly of Virginia

Operations and Performance of the Virginia Community College System

2017



COMMISSION DRAFT



Summary: Operations and Performance of the Virginia Community College System

WHAT WE FOUND

A relatively low percentage of community college students attain a credential

Community college students' ability to earn credentials and degrees is important for the state's economy and for ensuring that the state and families receive a return on the significant financial investment made in pursuit of a higher education. This study found that just 39 percent of Virginia's community college students earned a degree

or other credential, and this is also the case nationally. Moreover, community college students accumulate nearly a semester's worth of excess credits by the time they earn a bachelor's degree.

VCCS's open enrollment policy is key to expanding access to higher education, but many students who enroll exhibit factors that challenge their ability to succeed. Compared to students at Virginia's public four-year institutions, community college students are more likely to be older, parttime, low-income, the first in their family to attend college, and require remedial course work in English and math. These circumstances are associated with negative student outcomes, and could inform a systemwide strategy for prioritizing academic support services for at-risk students who could benefit from regular, more comprehensive, and even mandatory services, particularly academic advising.

WHY WE DID THIS STUDY

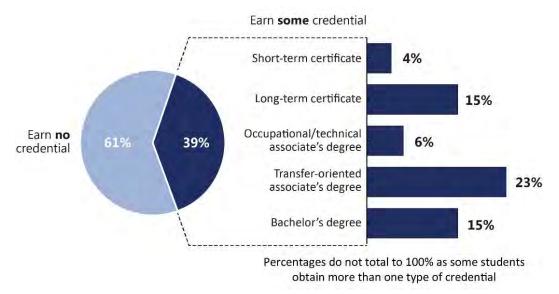
In 2016 the Virginia General Assembly directed the Joint Legislative Audit and Review Commission (JLARC) to review the Virginia Community College System (VCCS) (HJR 157). JLARC had not reviewed VCCS since 1991, despite notable changes in the system's operations and mission. The study mandate specifically directs JLARC staff to review the usefulness and affordability of VCCS's education and training, collaboration with other educational institutions, VCCS's spending, and the adequacy of the support provided by the VCCS system office.

ABOUT VCCS

VCCS was created 50 years ago to improve Virginians' access to higher education and prepare them for the workforce. The system comprises 23 separate colleges on 40 individual campuses, with numerous additional off-campus centers. The colleges offer hundreds of associate's degrees and short- and long-term certificates. VCCS operates statewide but is governed centrally, and is the sixth largest state entity, in terms of total appropriations (\$1.7 billion, FY16). In terms of enrollment, VCCS is the state's largest institution of higher education, with a total enrollment of about 250,000 individual students.

Many students are not receiving needed advising services

According to the research literature, students who use academic advising are more engaged and more likely to complete a credential. To improve student outcomes, community colleges must provide more intensive—and in some cases, mandatory—academic advising services for students. Colleges should be more strategic about how they structure their advising programs and require mandatory advising for some students. However, Virginia's community colleges do not have sufficient levels of staff to ensure that students receive the advising services that they need.



Majority of community college students did not earn a community college credential or bachelor's degree

SOURCE: JLARC cohort analysis of data on individual community college students maintained by SCHEV. NOTE: Includes students who transferred to four-year institutions and obtained a bachelor's degree. Students in the JLARC cohort analysis left college before several VCCS student success initiatives were implemented. Student success rates may be higher for a cohort entering community college after these initiatives were begun. Analysis does not include students in non-credit programs, such as the Workforce Credentials Grant program.

Dual enrollment programs do not appear to consistently save students time or money in their pursuit of bachelor's degrees

The dual enrollment program is not clearly reducing the time or resources that students and the state invest in earning higher education credentials. Dual enrollment students take the same amount of time as non-dual enrollment students to earn a bachelor's degree. The majority of dual enrollment students accumulate more credits than non-dual enrollment students to attain a degree.

Community colleges do not consistently ensure the quality of dual enrollment courses

Faculty and staff at some of the state's four-year institutions expressed concerns about the quality of dual enrollment courses and a reluctance to accept them for credit. There are several recommended quality assurance practices that colleges could use, but none are used consistently. Implementing quality assurance practices could increase the likelihood that dual enrollment credits will be accepted by the state's four-year institutions.

Transfer process and resources are difficult for students to use

Transfer students who earned a bachelor's degree took longer and earned more credits than their counterparts who started college in a four-year institution. Transfer agreements between the state's community colleges and four-year institutions have proliferated, are not kept up to date, and are not sufficiently accessible to students, making them difficult for students to understand and leverage. Streamlining transfer agreements and making them more accessible could improve the likelihood that Virginians who choose to pursue a bachelor's degree by starting first in community college will save time and money.

Continuing increases in community college tuition and fees may diminish affordability

VCCS is currently an affordable option for Virginians to pursue higher education, and the majority of students do not incur debt to finance their education. However, VCCS tuition and fees have grown from six percent of per capita disposable income to nearly 11 percent in the past 10 years. Ensuring affordability is a critical responsibility of the State Board for Community Colleges, and it should receive more comprehensive information about how proposed increases in tuition and fees will impact affordability, enrollment, and student success.

VCCS campus locations ensure access to college courses and training, but viability of smallest campuses should be examined

VCCS has a relatively efficient structure compared to community college systems in other states, as measured by the number of colleges per capita and enrollments per college. VCCS also appears to have a sufficient number of colleges and campuses to adequately serve the state's population, and there do not appear to be any colleges or campuses that should be closed or consolidated at the present time. VCCS has no formal process for considering closure or consolidation, but it should develop one to ensure that the need for closure or consolidation can be examined periodically.

WHAT WE RECOMMEND

Legislative action

- Require each public four-year institution to (i) report to the State Council for Higher Education for Virginia (SCHEV) and VCCS on how dual enrollment courses transferred to their programs, (ii) develop a detailed description of the community college course work that will be credited to specific programs, (iii) maintain up-to-date transfer agreements, and (iv) annually provide new and revised agreements to VCCS.
- Require SCHEV to annually identify the college programs with the poorest transfer student outcomes.
- Require VCCS to maintain a single repository for all transfer agreements.

Executive action

- Develop a proposal for identifying high school students who are not prepared for college-level course work and actions that could be taken to improve college readiness.
- Develop standard criteria that colleges can use for identifying students who are at risk of not succeeding in community college and a standard policy for colleges to follow to ensure that the most at-risk students receive proactive, individualized, mandatory academic advising and other academic services.
- Require colleges to use recommended quality assurance practices for dual enrollment courses and disclose more information about the transferability of dual enrollment courses.
- Present additional information to the State Board for Community Colleges to improve the board's ability to consider the impact of tuition increases on affordability.
- Develop a formal policy and criteria for periodically examining the need to close or consolidate colleges or campuses.

The complete list of recommendations is available on page v.

Recommendations: Operations and Performance of the Virginia Community College System

RECOMMENDATION 1

The Virginia Community College System should develop criteria and guidelines that colleges can use to identify students who are at risk for non-completion and could benefit from more regular, comprehensive support services. (Chapter 2)

RECOMMENDATION 2

The Virginia Community College System and the Virginia Department of Education should develop a proposal for administering the Virginia Placement Test or comparable assessment to high school students. The proposal should include (i) how the test could be administered, in which grades and to which students, (ii) an estimate of the cost of administering the test, and (iii) actions to be taken to improve the college readiness of students who exhibit the need for remediation. The proposal should be submitted to the House Education and Appropriations Committees and Senate Education and Health, and Finance Committees no later than September 1, 2018. (Chapter 2)

RECOMMENDATION 3

The Virginia Community College System should develop a system-wide policy to ensure that at-risk community college students receive proactive, individualized advising services at the most appropriate times. This policy should specify (i) the characteristics of students who should be required to meet with an academic adviser, (ii) the events or circumstances that trigger mandatory adviser meetings, and (iii) the adviser's role in subsequently monitoring student performance and intervening when appropriate. (Chapter 2)

RECOMMENDATION 4

The Virginia Community College System should develop a proposal for improving the capacity of community colleges to provide proactive, individualized, mandatory advising services to students who are at risk for not completing a degree or credential and could benefit from more regular, comprehensive advising services. The proposal should be submitted to the House Education and Appropriations Committees and Senate Education and Health, and Finance Committees no later than September 1, 2018. (Chapter 2)

The Virginia Community College System should establish a policy requiring students to (i) attend orientation before enrolling in courses and (ii) complete the student development course during their first semester at a community college. This requirement should apply to students enrolled in for-credit degree or credential programs who are at risk for non-completion and could benefit from more regular, comprehensive support services. (Chapter 2)

RECOMMENDATION 6

The Virginia Community College System should develop a system-wide strategic plan that focuses exclusively on how the system will support student success. The plan should describe (i) how colleges will identify the factors associated with poor student outcomes and identify students who exhibit those factors, (ii) actionable strategies for mitigating the effects of those factors on student outcomes, (iii) an implementation plan for undertaking specific strategies, and (iv) how the impact of the strategies will be evaluated. The plan should be developed collaboratively with community college staff, including presidents, vice presidents for academic services, faculty members, and non-faculty professional advisers. (Chapter 2)

RECOMMENDATION 7

The General Assembly may wish to include language in the Appropriation Act to require the state's public four-year institutions of education to report, for dual enrollment students, (i) the total number of dual enrollment credits on students' transcripts, (ii) the total number of those credits that were accepted for credit by the institutions, and (iii) whether the credits were applied to elective requirements, program requirements, or other requirements. This information should be reported to the State Council of Higher Education for Virginia (SCHEV) and the Virginia Community College System (VCCS) at the end of the 2017-18 academic year and in subsequent years as necessary to help improve the quality of dual enrollment courses and the state's dual enrollment policies. VCCS and SCHEV should use this information to identify dual enrollment courses that are not routinely accepted for credit. (Chapter 3)

RECOMMENDATION 8

The Virginia Community College System, in coordination with the Virginia Department of Education, should modify the Governing Principles for Dual Enrollment to require the use of nationally recommended practices for dual enrollment programs. Required practices should include (i) periodic review of course materials, to ensure that content and rigor are aligned with the on-campus equivalent course; (ii) recurring, formal evaluation of instructors; and (iii) periodic classroom observation. (Chapter 3)

The Virginia Community College System, in coordination with the Virginia Department of Education, should modify the Governing Principles for Dual Enrollment to require community colleges and school divisions to clearly disclose to students taking these courses, for each dual enrollment course, the equivalent non-dual enrollment course, which academic and career and technical programs will accept the course's credits, and which community colleges offer those programs. (Chapter 3)

RECOMMENDATION 10

The Virginia Community College System should develop a database for maintaining information on all dual enrollment courses offered in the state. The database should include a course description, the location where it is taught, the sponsoring community college, the specific academic or career and technical programs that will accept the course's credits, and which community colleges offer those programs. (Chapter 3)

RECOMMENDATION 11

The General Assembly may wish to consider creating a financial assistance grant program to help high school teachers obtain the necessary credentials to teach dual enrollment courses. (Chapter 3)

RECOMMENDATION 12

The Virginia Community College System, in coordination with the Virginia Department of Education, should collect data from each community college and each school division on the expenditures that are directly attributable to the dual enrollment program. This expenditure data should be used to develop a single, statewide dual enrollment funding formula and a tuition and fee structure that is consistent across all courses and colleges and that reflects the costs of operating a high-quality dual enrollment program. (Chapter 3)

RECOMMENDATION 13

The General Assembly may wish to amend the Code of Virginia to require the State Council of Higher Education for Virginia to develop guidelines for the state's public two- and four-year higher education institutions to follow in developing program maps for transfer pathways. These guidelines should specify (i) the most commonly used transfer pathways for which program maps should be developed and (ii) standard content to be included in each program map. (Chapter 3)

RECOMMENDATION 14

The General Assembly may wish to amend the Code of Virginia to require that each public four-year institution in Virginia develop, in collaboration with the Virginia Community College System, program maps for transfer pathways. The program maps should be consistent with the recommended guidelines to be developed by the State Council of Higher Education for Virginia. (Chapter 3)

The General Assembly may wish to amend § 23.1-908 of the Code of Virginia as follows: (i) to require that the Virginia Community College System (VCCS) develop and maintain an online single repository for all agreements, course equivalency tools, and other informational resources related to transferring from a community college to a public four-year institution; (ii) to require the State Council of Higher Education for Virginia to send to VCCS all the transfer resources that it has collected; and (iii) to require all public four-year institutions to keep their transfer agreements updated and annually send to VCCS all new and revised transfer agreements and other transfer-related resources. (Chapter 3)

RECOMMENDATION 16

The General Assembly may wish to consider amending the Code of Virginia to require that the State Council of Higher Education for Virginia (SCHEV) annually identify the transfer pathways in which transfer students have poorer outcomes, as measured by lower completion rates, longer time to degree, more credits accumulated, and lower course grades. This information should be reported at the end of every academic year, beginning with the 2017-18 academic year, be shared with individual community colleges and four-year institutions, and be used to identify community college courses that are not routinely accepted for credit by the state's public four-year higher education institutions. (Chapter 3)

RECOMMENDATION 17

The Virginia Community College System should specify in its policy manual the information staff must present to the State Board for Community Colleges when the board is evaluating proposed tuition and fees increases. At a minimum, this information should include specific college-level metrics such as tuition and fees and net price relative to income in each college's service area. It should also include information about whether federal, state, and institutional financial aid have kept pace with increases in tuition and fees. (Chapter 4)

RECOMMENDATION 18

The system office of the Virginia Community College System should assess the adequacy of staffing in those divisions that most directly affect colleges' operations, including the divisions of academic services and research and administrative services. The review should also determine whether duties could be more efficiently distributed between supervisors and their direct reports, including whether some supervisory positions could be reclassified as non-supervisory to potentially distribute workload more efficiently. (Chapter 5)

The State Board for Community Colleges should adopt a formal policy to periodically assess the need to close or consolidate community colleges or campuses. The formal policy should specify the roles of the board, the system office, college presidents, college boards, and local governments in decisions to close or consolidate colleges or campuses. Three college-level factors should prompt an assessment: (i) high operating costs per student FTE, with increasing costs as a trend; (ii) low enrollment, with decreasing enrollment as a trend; and (iii) inability to offer core academic programs. As part of the assessment, the board should use four criteria to determine when a college or campus should be closed or consolidated: (a) access to community college programs; (b) colleges' ability to offer quality, in-demand programs; (c) the potential for net savings; and (d) the impact of closure and consolidation on the local economy. (Chapter 5)

RECOMMENDATION 20

The Virginia General Assembly may wish to amend the Code of Virginia to (i) clarify that Workforce Credentials Grant (WCG) funds be prioritized for, though not limited to, credentials for which there is a documented unmet employer demand and (ii) permit colleges to use a portion of their WCG funds to address the infrastructure or personnel challenges associated with program development or expansion if these challenges cannot be financed through other resources. (Chapter 6)

RECOMMENDATION 21

The Virginia Board for Workforce Development, in collaboration with the Virginia Community College System and the State Council of Higher Education for Virginia, should develop a methodology that can be used by community colleges to identify regional employer demands for occupations and distinguish between demand that is sufficiently met by the existing workforce and demand that is not. The Board should incorporate in the methodology both labor market data and qualitative feedback from employers. (Chapter 6)

3 Effectiveness of Dual Enrollment and College Transfer Policies

SUMMARY Dual enrollment and college transfer policies are key to ensuring that Virginia students can maximize the potential financial and educational benefits of the community college system, but in Virginia, these policies are not consistently effective. Although dual enrollment students attend higher education institutions and earn postsecondary credentials at higher rates, many dual enrollment students do not reduce the total amount of time they take to attain a bachelor's degree. Further, community college students who transfer to public four-year institutions in Virginia are less likely to earn a bachelor's degree than non-transfer students, and those who do accumulate more credits than non-transfer students. The Virginia Community College System (VCCS), the Virginia Department of Education (VDOE), and the State Council of Higher Education for Virginia (SCHEV) should take action to ensure that the dual enrollment program and the state's various college transfer initiatives are structured and implemented to maximize the potential benefits to students. VCCS, DOE, and SCHEV should ensure that dual enrollment courses provide the content and quality needed for transfer and that transfer agreements are simplified and broadened so that they are more usable and accessible to students.

A key element of the value of attending a Virginia community college is that students may be able to reduce the total cost of earning a bachelor's degree or other postsecondary credential by completing the first two years of their four-year degree program at a lower-cost two-year institution. However, realizing these benefits requires significant coordination between K-12 school divisions, community colleges, and four-year institutions, and a robust and effective state role in overseeing and facilitating coordination efforts. The state's ability to effectively facilitate this coordination is challenged because Virginia's higher education institutions have considerable autonomy and their curricula and admissions requirements vary significantly. Similarly, the relative autonomy of the state's school divisions limits the state's ability to influence students' transition between high school and higher education.

While numerous short-term certificates and two-year degrees can be earned at Virginia's community colleges, and these credentials are a key benefit of a community college education, community college is also frequently promoted as a gateway to attaining a bachelor's degree. However, for many community college students, completing an associate's degree in two years, transferring seamlessly to a four-year institution, and completing a bachelor's degree in two more years is unrealistic, particularly given that students are more likely to be part-time, low-income, and exhibit other factors that can slow the pace of their progression through college. While it may be unrealistic to make this a seamless process that matches students' expectations, the state's key **Dual enrollment** allows high school students the opportunity to earn college credit by taking dual enrollment courses, which also fulfill high school diploma requirements. In Virginia, a few dual enrollment courses are offered by four-year institutions, but the vast majority are offered by the state's community colleges. In fall 2016, 33,700 students were dual enrolled in Virginia.

JLARC's analysis of dual enrollment student-level data focused on 12,332 dual enrollment students ages 17-19 years old who attempted at least 12 credits during their first year of enrollment in a Virginia community college. The analysis excluded dual enrollment students who did not enroll in a public higher education institution in Virginia. mechanisms to facilitate students' successful progression through postsecondary education—the dual enrollment and four-year transfer initiatives—need to be structured and administered as effectively as possible.

Higher proportion of dual enrollment students attend and complete college

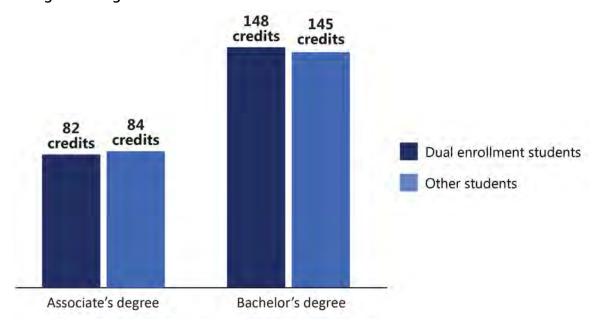
A key objective of a dual enrollment program is to increase the likelihood that high school graduates will enroll in higher education and ultimately earn a postsecondary credential. In Virginia, this objective is being met. Seventy-five percent of dual enrollment students enroll in a public community college or university in Virginia after high school, compared to approximately 60 percent of non-dual enrollment students. Further, a higher proportion of dual enrollment students (51 percent) attain college credentials compared to non-dual enrollment students (35 percent). This is true for all three main credential categories—short- and long-term certificates, associate's degrees, and bachelor's degrees.

Dual enrollment reduces time and cost of credential attainment for community college students

Another key objective of the dual enrollment program is to reduce the time and cost of attaining a postsecondary credential, and this objective is generally being met for community college students. Dual enrollment students who enroll in community college after high school take about one semester less, on average, to earn a postsecondary credential than non-dual enrollment students, and both categories of students earn similar numbers of credits (Figure 3-1). A portion of the credits earned by these dual enrollment students were earned while in high school, at a lower cost than the tuition and fees they would have paid if they had taken the courses on a college campus. Therefore, for these students, the dual enrollment courses likely reduced the total amount paid to earn their credential, compared to non-dual enrollment students.

Dual enrollment does not as clearly benefit students at four-year institutions

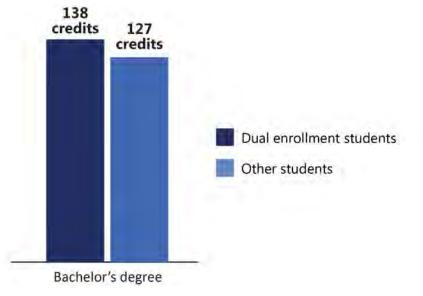
Dual enrollment does not reduce the time and cost of attaining a postsecondary credential for the majority of students who enter a four-year institution directly after high school. Dual enrollment students take the same amount of time as non-dual enrollment students to earn a bachelor's degree—4.4 years. Moreover, the majority (69 percent) of dual enrollment students who started college at a four-year institution earned more credits than the average number earned by non-dual enrollment students. These students earn 11 more credits, on average, than non-dual enrollment students (Figure 3-2). These findings are particularly significant because dual enrollment students who enroll directly in a four-year institution account for the majority of dual enrollment students. FIGURE 3-1 Dual enrollment and non-dual enrollment students who enter community college after high school accumulate a similar number of credits



SOURCE: JLARC staff cohort analysis of data on individual community college students maintained by SCHEV. NOTE: Analysis reflects the credits attained by dual enrollment students over seven years since they first enrolled in community college or a four-year institution, with enrollment dates ranging from Fall 2008 to 2011.

FIGURE 3-2

Dual enrollment students who enter four-year institutions after high school accumulate more credits than non-dual enrollment students



SOURCE: JLARC staff cohort analysis of data on individual community college students maintained by SCHEV. NOTE: Analysis reflects the credits attained by dual enrollment students over seven years since they first enrolled in community college or a four-year institution, with enrollment dates ranging from Fall 2008 to 2011.

Four-year institutions are reluctant to accept dual enrollment credits

Academic departments at four-year institutions determine whether dual enrollment credits transfer, and if so, whether they count toward the student's major or as elective credits. Staff at several four-year institutions expressed concerns about the quality of dual enrollment courses taught in high schools and observed that not all dual enrollment courses are accepted for credit by four-year institutions. Their primary concern is that school divisions and colleges are not effectively ensuring that the dual enrollment courses that are taught in high schools reflect the quality of college-level course work, diminishing their potential to be applied toward the requirements of four-year degrees. Staff at both VCCS and SCHEV confirmed that four-year institutions have expressed a reluctance to apply some dual enrollment credits to students' majors.

The following summarize the concerns expressed by the chief transfer officers at four of the state's four-year institutions:

- One officer stated that to improve dual enrollment in Virginia, the state should improve the quality of the courses by ensuring that high schools are teaching the courses with the level of instruction that is needed for college-level courses. This individual observed that students whose dual enrollment course work was taken solely in high school were not prepared for the four-year institution's course work.
- Another officer stated that his university will not accept dual enrollment credits for a specific freshman-level English course.
- Two more chief transfer officers expressed general concerns with the quality of dual enrollment courses and with the consistency of the content that is taught in them. One stated, "I think there's broad concern about dual enrollment."

Many community college dual enrollment coordinators observed that four-year institutions are reluctant to accept dual enrollment credits:

- "Some [four-year] colleges do not want to accept dual enrollment courses as transfer."
- "The community colleges must take full accountability for the quality of dual enrollment offerings. We must work with the universities to ensure transferability. It is unacceptable for the same course to be accepted for transfer if taken on the college campus, but rejected if offered through dual enrollment."
- "Four-year schools are reluctant to take the courses. Having faculty buy-in with dual enrollment to review syllabi and provide professional development is critical."
- "Statewide, it would benefit students and parents if dual enrollment was more highly regarded by the four-year colleges/universities."

- "Students report that UVA does not accept some of their credits if completed as dual enrollment (particularly science courses)."
- A community college executive reported that an issue he finds most troubling is the transferability of dual enrollment courses. This individual asked, "Once we've ensured consistency and quality, how can four-year institutions not accept these credits for transfer?" and said that one institution will honor their dual enrollment courses while others will "cherry pick."

To fully evaluate the extent to which four-year institutions accept dual enrollment credits, more data are needed. It is clear that dual enrollment does not as clearly reduce the time and cost of earning a bachelor's degree for students who attend four-year institutions directly after high school as much as it does students who attend community college first. However, additional data are needed to determine whether dual enrollment credits are being counted toward students' degree requirements. This information is needed to determine the program's effectiveness and to improve the transferability of courses, which would improve the extent to which these dual enrollment students save time and money to attain a bachelor's degree. If available, it would have been possible to determine the extent to which the additional credits dual enrollment students accumulated were earned through dual enrollment courses that were not accepted for transfer.

This data could be captured in the student-level data that is maintained by VCCS and SCHEV. One of the challenges of such an effort would be determining whether dual enrollment and community college credits earned by students who attain their bachelor's degree are counted toward the student's major, given the tendency of students to change majors. At a minimum, however, SCHEV and VCCS could begin tracking whether dual enrollment credits are accepted for credit by two- and four-year institutions. Actions could then be taken to improve the transferability of courses, including taking steps to improve their quality, if necessary, and developing strong partnerships between community colleges and four-year institutions, starting with those that are logical partners geographically. To the extent that there is additional data to collect or analyze, tracking the acceptance of dual enrollment credits may require additional staffing resources.

The 2017 General Assembly passed legislation intended to improve the transferability of dual enrollment credits (sidebar). House Bill 1662 requires SCHEV to develop a policy for higher education institutions to follow for granting general education course credit to dual enrollment students. Such a policy could lead to more consistent treatment of dual enrollment credits by the state's four-year institutions. Collecting data on each institution's treatment of dual enrollment credits, as recommended below, could help inform the policy being developed by SCHEV. New legislation requires SCHEV to develop a **policy on course credit for dual enrollment courses**. Under HB 1662 (2017), the new statewide policy must include the conditions under which four-year institutions must grant general education course credit. Across institutions, course credit must be as consistent as possible.

JLARC staff surveyed dual enrollment coordinators at all 23 community colleges in Virginia. Coordinators were asked about various topics, including the types of dual enrollment courses the college offers and the practices used to ensure the quality of dual enrollment courses. 22 of 23 dual enrollment coordinators responded to the survey, a response rate of 96 percent.

(See Appendix B.)

National Alliance of Concurrent Enrollment Partnerships

recommends that (1) colleges verify that the teaching methods, materials, and syllabi used in high school dual enrollment courses are equivalent to on-campus courses; (2) dual enrollment instructors receive professional development; (3) college faculty conduct classroom observations; and (4) dual enrollment instructors possess credentials that qualify them to teach college courses.

The General Assembly may wish to include language in the Appropriation Act to require the state's public four-year institutions of education to report, for dual enrollment students, (i) the total number of dual enrollment credits on students' transcripts, (ii) the total number of those credits that were accepted for credit by the institutions, and (iii) whether the credits were applied to elective requirements, program requirements, or other requirements. This information should be reported to the State Council of Higher Education for Virginia (SCHEV) and the Virginia Community College System (VCCS) at the end of the 2017-18 academic year and in subsequent years as necessary to help improve the quality of dual enrollment courses and the state's dual enrollment policies. VCCS and SCHEV should use this information to identify dual enrollment courses that are not routinely accepted for credit.

Community colleges do not consistently ensure the quality of dual enrollment courses

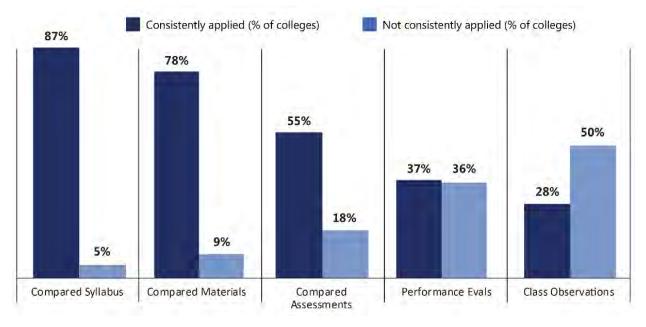
Community colleges need to proactively oversee the development and teaching of dual enrollment courses because most courses are taught in high school classrooms by high school teachers. College staff at 16 community colleges reported that ensuring the quality of dual enrollment courses taught in high school and compliance by school divisions with program requirements are among their most problematic challenges (sidebar). The workload associated with overseeing high school-based dual enrollment courses can be highly demanding—individual colleges are responsible for, on average, 82 different courses taught at 11 different public high schools in their service areas. Further, many high schools offer "blended" dual enrollment courses, in which dual enrollment and non-dual enrollment high school students are placed in the same course. Maintaining college-level rigor is especially difficult in blended classrooms, according to staff at the VCCS system office and some colleges and four-year universities.

Professional development for high school dual enrollment instructors can be used to standardize and ensure the quality of dual enrollment courses designed and taught in high schools, but it is not used consistently or effectively by all colleges. During the 2016-17 academic year, many colleges did not include key topics in their dual enrollment professional development efforts, and most colleges do not mandate attendance by new instructors.

Colleges and school divisions can also ensure course quality by using nationally recommended practices (sidebar), but Virginia's community colleges do not uniformly or consistently use these recommended practices (Figure 3-3). Few community colleges consistently apply those practices that are key to ensuring instructional quality and measuring students' mastery of college-level material. According to 11 dual enrollment coordinators, classroom observations were conducted for fewer than half of their dual enrollment courses during the 2016-17 academic year. Only eight colleges reported comparing course assessments, such as tests and examinations, to those used in the

FIGURE 3-3

Colleges inconsistently apply recommended quality assurance practices to dual enrollment courses



SOURCE: JLARC staff survey of community college dual enrollment coordinators, 2017. NOTE: Numbers do not add to 100% because some dual enrollment coordinators responded that they "Do not know" whether the practices are consistently applied to dual enrollment courses taught in high schools.

on-campus course for all or most dual enrollment courses. Moreover, while most colleges reported using at least some key practices for all or most of their dual enrollment courses, no colleges consistently used all of the recommended practices.

VCCS internal audits have documented problems with colleges' inconsistent use of recommended practices. A 2012 audit found that colleges were not consistently conducting evaluations of instructors or ensuring that course syllabi were equivalent to on-campus courses. Later audits determined that inconsistent use of recommended practices was still a problem. For example, these audits found instances in which dual enrollment course syllabi were not equivalent to the syllabi used for the comparable on-campus course, that there was inadequate oversight of dual enrollment faculty by college faculty, and that some dual enrollment instructors did not have the credentials needed to qualify as VCCS faculty.

Applying these recommended practices appears to prompt colleges to make improvements to their dual enrollment courses. During the 2016-17 academic year, utilization of these practices resulted in 13 colleges making changes to course syllabi, 11 colleges modifying dual enrollment course materials, and nine colleges removing ineligible students from their dual enrollment courses. By ensuring that all dual enrollment programs consistently use recommended practices, VCCS can improve the likelihood that dual enrollment credits will be applied by four-year institutions to students' degrees.

The Virginia Community College System, in coordination with the Virginia Department of Education, should modify the Governing Principles for Dual Enrollment to require the use of nationally recommended practices for dual enrollment programs. Required practices should include (i) periodic review of course materials, to ensure that content and rigor are aligned with the on-campus equivalent course; (ii) recurring, formal evaluation of instructors; and (iii) periodic classroom observation.

Transferability of dual enrollment courses is not always clear

According to community college staff, dual enrollment students have earned an assortment of community college credits that do not count toward their chosen degree or credential. More than one-third of colleges reported that they sponsor courses that do not count toward an academic or technical program at their colleges. Community colleges are required by statute to offer dual enrollment courses that count toward the completion of a one-year uniform certificate of general studies or a two-year associate's degree in general education (sidebar), and this requirement is being followed. However, colleges are not prevented from offering dual enrollment courses that do not count toward any of the credentials they offer. School division staff frequently initiate the development of new dual enrollment courses, and topic selection is often driven by student interest and availability of qualified instructors. As a result, some dual enrollment courses are not designed or coordinated to qualify for credit at the sponsoring community college.

Most colleges that offer courses that do not count toward any of their own programs reported partnering with a neighboring community college to which the courses do transfer. However, students may not be aware of limits on the use of their college credits. When students enroll in dual enrollment courses, they may wrongly assume that course credits will be accepted at the community college that is sponsoring the course. Further, because the sponsoring college does not itself offer an on-campus equivalent course, the college is not necessarily equipped to ensure the quality and rigor of the course.

Steps should be taken to ensure that dual enrollment students are fully aware of the transferability of their dual enrollment course to a community college academic or career and technical program. The Governing Principles for Dual Enrollment should be modified to require community colleges and school divisions to identify (i) each dual enrollment course's equivalent non-dual enrollment course, (ii) the academic or career and technical programs that will accept the credits, and (iii) which community colleges offer the relevant academic and career and technical programs. The VCCS system office should develop a database of all dual enrollment courses that will allow

A Uniform Certificate of General Studies is designed for students intending to transfer to a four-year institution. The certificate requires up to one year of courses that cover the core general education competencies, such as communication, critical thinking, and quantitative reasoning.

(§ 23.1-907.F of the Code of Virginia)

system office staff to conduct system-wide reviews of the transferability of dual enrollment credits. Currently, there is no central repository for information on dual enrollment course offerings.

RECOMMENDATION 9

The Virginia Community College System, in coordination with the Virginia Department of Education, should modify the Governing Principles for Dual Enrollment to require community colleges and school divisions to clearly disclose to students taking these courses, for each dual enrollment course, the equivalent non-dual enrollment course, which academic and career and technical programs will accept the course's credits, and which community colleges offer those programs.

RECOMMENDATION 10

The Virginia Community College System should develop a database for maintaining information on all dual enrollment courses offered in the state. The database should include a course description, the location where it is taught, the sponsoring community college, the specific academic or career and technical programs that will accept the course's credits, and which community colleges offer those programs.

Difficulty recruiting qualified instructors contributes to program shortcomings

Some dual enrollment programs have had difficulty recruiting high school teachers who qualify as dual enrollment instructors. Difficulties finding qualified high school instructors have contributed to programs' inability to develop in-demand courses, use of the less desirable "blended" course approach, and provision of dual enrollment courses that were unrelated to a specific credential program at the college. Most colleges (77 percent) identified instructor recruitment as a challenge. This challenge is not isolated to rural areas of the state or smaller community colleges and school divisions; some of the state's largest dual enrollment programs identified the lack of qualified instructors as a key challenge.

VCCS requires that dual enrollment instructors meet the faculty qualification guidelines established by the Southern Association of Colleges and Schools Commission on Colleges, and these requirements can be difficult for high schools to meet. A key requirement is a graduate degree in the subject to be taught by the instructor, or—at minimum—a master's degree in any subject, with at least 18 graduate course credits in the subject to be taught. According to college staff, high school teachers are unlikely to have a graduate degree in a specific academic subject other than education, or possess all of the 18 graduate credits required in lieu of a graduate degree. Further, individuals with graduate degrees in high-demand subjects, such as science, math, and technology, have more lucrative employment options than teaching at the high school level. Other states have faced challenges recruiting qualified instructors for dual enrollment courses taught in high schools, and like Virginia, most other states follow the requirements of their higher education accrediting bodies. Some have provided financial aid to help instructors earn the credentials that will qualify them to teach a dual enrollment course. For example:

- Minnesota requires school districts to set aside a portion of their revenues for professional development initiatives, which can include grants to teachers to pay for course work.
- Wyoming has a loan forgiveness program for public school teachers who take courses to qualify as an adjunct professor.
- Ohio established a \$5 million competitive grant program to help high school teachers complete course work necessary to qualify as dual enrollment instructors.

Virginia could establish a program of financial assistance for high school teachers to obtain the credentials necessary to qualify as dual enrollment instructors. Funds could be awarded in the form of grants for teachers who commit to completing necessary course work and teach a course that can be credited toward the sponsoring college's own credential or degree requirements as well as the degree or credential requirements of a variety of Virginia's public four-year institutions. The grant program could be (1) prioritized for subject areas where the need for instructors is greatest and (2) limited to colleges and school divisions that use recommended practices for ensuring the quality of dual enrollment courses.

RECOMMENDATION 11

The General Assembly may wish to consider creating a financial assistance grant program to help high school teachers obtain the necessary credentials to teach dual enrollment courses.

Dual enrollment funding model leads to statewide variation in program costs

The approach taken to funding dual enrollment programs is unnecessarily inefficient and allows for wide variation across the state in how much school divisions, colleges, and students pay for courses. Each college negotiates separately with each school division in its service area to determine the percentage of dual enrollment course tuition and fees the school divisions will pay.

Compared to a traditional student enrolled in a community college course, colleges receive less net income for dual enrollment students due to this reimbursement policy. Community colleges are paid tuition by school divisions, and the colleges then reimburse at least a portion of this tuition back to the school divisions. At a minimum, school divisions are reimbursed for 60 percent of the courses' tuition and fees. Across the state, reimbursement rates range from 60 percent to 100 percent, with an average of 89 percent. Some school divisions qualify for higher reimbursement from colleges by agreeing to utilize certain practices. For example, a school division that agrees to provide textbooks to dual enrollment students can negotiate a higher reimbursement rate.

The prices that students pay for dual enrollment courses vary statewide, and in a few cases there is even variation within the same school division. Some of the variation in student costs is due to the reimbursement structure. For example, some school divisions charge students for unreimbursed costs, and others do not.

Colleges and school divisions both incur costs directly related to the administration of the dual enrollment program, and analysis performed by VCCS staff determined that these administrative costs are not covered by the existing funding approach. Costs are minimized because most dual enrollment courses are taught in high schools using existing high school infrastructure and faculty, and course oversight is performed by existing community college faculty. However, high schools do sometimes hire faculty specifically to teach the dual enrollment courses that are in greatest demand, and most community colleges employ full-time dual enrollment coordinators to carry out the day-to-day operations of the program. All colleges reported that they target a portion of their student support services, such as advising and tutoring, specifically to dual enrollment students, which is also a source of additional costs.

To be sustainable in the long term, as well as predictable and efficient, the funding model for dual enrollment should be modified to ensure that, at a minimum, the costs incurred by colleges and school divisions specifically for administering dual enrollment courses are paid for and that a single funding formula is uniformly used by all school divisions and colleges. The following are examples of potential unique costs that should, at a minimum, be covered by a dual enrollment funding model:

- costs incurred by the colleges to (1) employ at least one full-time dual enrollment coordinator, (2) have college faculty and staff conduct course development and oversight activities, and (3) provide training opportunities for high school teachers; and
- costs incurred by school divisions to conduct recruitment and professional development activities for dual enrollment instructors.

Detailed data has not been collected by VCCS or VDOE to precisely calculate colleges³ and school divisions' costs related to dual enrollment, and this data is necessary to develop a robust funding model. VCCS, with assistance from VDOE, should develop a detailed data collection instrument that can be distributed to all colleges and school divisions for the purpose of collecting data on distinct dual enrollment program costs. This effort should span the length of at least one semester, and steps should be taken to distinguish expenditures attributable directly to dual enrollment program activities.

This data could be used to develop a tuition and fee structure specific to dual enrollment courses. For example, a figure could be calculated reflecting the difference between (1) the amount of general funds spent on each dual enrollment student and Most students participating in Virginia's dual enrollment program take courses taught in high schools by high school instructors. As a result, JLARC staff focused on this aspect of the program. Smaller numbers of students take dual enrollment courses on a community college campus or in their high school taught by community college faculty.

[School] superintendents across the Commonwealth talk to each other and some are asking why [dual enrollment] is free for their neighbor (at one college) and it costs at another (at a different college).

"

 Community college staff (2) the costs incurred by the high schools and colleges attributable to the dual enrollment program. This figure could represent the tuition and fees needed to cover the cost of the program.

Depending on whether the cost of tuition and fees is passed on to students, or whether it is covered by school divisions, the cost of dual enrollment courses would increase under this approach for those students who do not currently pay for dual enrollment courses. High school students are not currently eligible for state or federal financial aid for college courses taken in high school. Staff at several community colleges observed that increasing student costs for dual enrollment would prohibit the lowest-income students from taking advantage of dual enrollment opportunities.

The impact on students and the demand for dual enrollment courses could be mitigated by phasing in the new funding model just described and by developing a financial aid program targeted at the lowest-income dual enrollment students. Sources of financial aid funding could be general funds, although the Virginia Foundation for Community College Education and colleges' individual foundations have been used in the past to provide financial assistance to community college students. To ensure that further investment in the program—by families, the state, or other entities—is maximized, such an effort could be deferred until VCCS has taken action to ensure the quality and transferability of dual enrollment courses.

RECOMMENDATION 12

The Virginia Community College System, in coordination with the Virginia Department of Education, should collect data from each community college and each school division on the expenditures that are directly attributable to the dual enrollment program. This expenditure data should be used to develop a single, statewide dual enrollment funding formula and a tuition and fee structure that is consistent across all courses and colleges and that reflects the costs of operating a high-quality dual enrollment program.

Substantial number of community college students transfer to four-year institutions each year

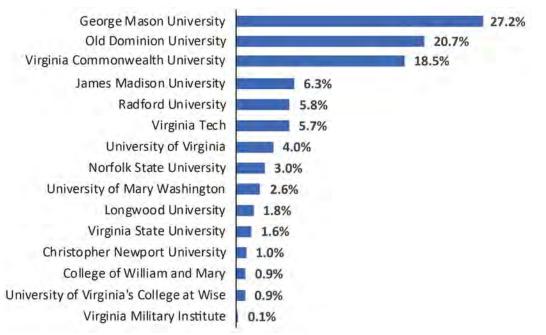
A substantial and growing number of community college students transfer to public four-year institutions in Virginia each year. More than 11,600 students transferred in 2014-15, and the number of transfer students has increased an average of 4.4 percent annually since 2007-08. Nearly two-thirds of VCCS students transferring to a public four-year institution in 2014-15 went to George Mason University, Old Dominion University, or Virginia Commonwealth University (Figure 3-4). Substantially smaller percentages of transfer students went to other institutions, such as Virginia Tech, the University of Virginia, and the College of William and Mary. More than half of transfer students in 2014-15 came from just two community colleges: Northern Virginia, and Tidewater.

For so many in our area, dual enrollment is the only door to college...Charging tuition...is a significant barrier for those students, especially if they come from a home where higher education is not valued.

Community college staff

Commission draft 40

FIGURE 3-4 Two-thirds of transfer students go to three four-year institutions (2014-15)



SOURCE: JLARC staff analysis of Two-Year TR03 Report: Transfer Origins and Recipients, SCHEV. Note: Excludes community college students transferring to private four-year institutions.

Uncertainty of transfer process and inaccessibility of transfer resources diminish potential benefits

Transfer articulation and guaranteed admissions agreements are critical to facilitating the transfer process because they are intended to provide for admission into a fouryear institution and ensure that community college credits fully transfer as credit toward a student's major at their four-year institution. However, the agreements have proliferated, are not standardized, are not kept up to date, and are not sufficiently accessible to students, making them difficult for students to understand and leverage. Moreover, many do not provide sufficient assurance that four-year institutions will grant students program credit for their community college courses. Agreements and other information about the transfer process, can be difficult for students and their advisers to find because they are not maintained in a single, accessible location.

Transfer agreements between Virginia's public community colleges and four-year institutions are required by statute (§ 23.1-907). For a student to fully realize the potential benefits of the transfer strategy, at least three conditions have to be met.

- 1. The student would need to choose a public four-year institution and a major soon after being admitted to the community college so that the specific general education and prerequisite courses that will transfer to a four-year institution can be taken in a timely manner. The student would need to start on the courses necessary for transfer, in order to complete them in the first two years.
- 2. The four-year institution would need to accept the student in both the general undergraduate program and the student's chosen degree program.
- 3. The four-year institution would need to accept the student's community college course work for credit in the student's chosen degree program.

If these three conditions are not met, the student will not fully benefit from the transfer strategy or may need additional credits to earn a bachelor's degree. Each additional credit would reduce the potential savings from using the transfer strategy.

The legislation establishing the state's policies on the transfer strategy contemplates that agreements between individual community colleges and four-year institutions will be foundational to students' ability to earn four-year degrees efficiently by starting in community college. Promoting effective transfer agreements is the state's primary role in ensuring that this strategy meets students' and their families' expectations for the transfer strategy's academic and financial benefits.

Transfer students take longer and accumulate more credits to earn a bachelor's degree

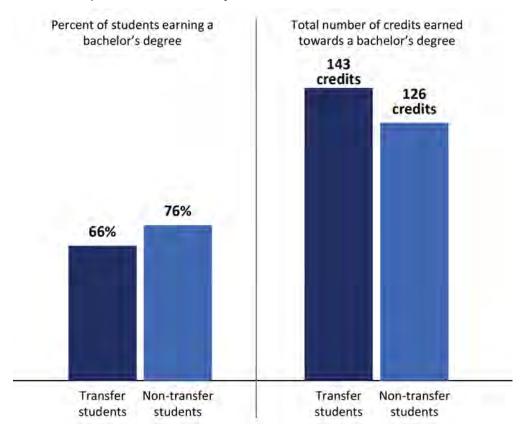
Compared to students directly entering a four-year institution, students transferring from a community college earn bachelor's degrees at a lower rate and accumulate more credits toward a degree. Transfer students at public four-year institutions earned bachelor's degrees at a rate of 66 percent, compared to 76 percent of non-transfer students (Figure 3-5). The median number of years transfer students took to complete their degree was five years, compared to four years by non-transfer students.

Transfer students also tended to accumulate a larger number of credits while earning their bachelor's degrees—a median of 143 credits, compared to 126 for four-year students (Figure 3-5). The additional 17 credits accumulated by the typical transfer student are roughly equivalent to a full semester, and would cost students \$2,420 at a community college or \$6,780 at the average cost of tuition and fees charged by public four-year institutions. One-fourth of transfer students who earned a bachelor's degree accumulated at least 31 credits more than the typical non-transfer four-year student. That represents an additional year of courses, at a minimum cost of \$4,420 to the student, assuming the additional courses are taken at the community college and \$12,360 if taken at a four-year institution.

The specific general education courses a student should take during their first two years will depend on their intended major and four-year institution. For example, a community college student would need to complete different general education math courses for a bachelor's degree in mechanical engineering versus psychology.

FIGURE 3-5

Transfer students earn bachelor's degrees at lower rates and accumulate more credits compared to other four-year students



SOURCE: JLARC staff cohort analysis of data on individual community college students maintained by SCHEV. NOTE: Analysis reflects the experience of students over seven years who first enrolled in college between Fall 2008 and Fall 2011.

Transfer agreements have proliferated and are difficult to use

Community college students should be able to use transfer agreements to identify and take a set of courses while in community college that will lead to a bachelor's degree, but across Virginia's public institutions, transfer agreements are numerous, overly complicated or restrictive, inconsistent across schools, and not sufficiently accessible. The lack of organization and accessibility diminishes the efficiency and effectiveness of the transfer strategy. As required by statute, community colleges and four-year institutions have developed agreements that provide for admission and the transfer of credits to four-year institutions (Table 3-1). A total of 38 guaranteed admissions agreements have been developed by community colleges and four-year institutions. JLARC staff identified nearly 300 transfer articulation agreements developed between community colleges and four-year institutions, covering a wide range of transfer pathways leading from an associate's degree to various bachelor's degrees. Because there is no single repository for articulation agreements, the total number of these agreements is not known by VCCS or SCHEV staff.

TABLE 3-1 Two types of transfer agreements are primary mechanisms to facilitate transfer from community colleges to four-year institutions

Type of agreement	Description
Guaranteed admission agreements	Guarantee that students meeting certain academic standards will be admit- ted to the public four-year institutions without going through the competi- tive admissions process. Do not guarantee admission to academic pro- grams.
Articulation agreements	List the community college courses needed to satisfy course requirements for specific programs or majors at a four-year institutions.

SOURCE: JLARC staff analysis of transfer agreements between community colleges and public four-year institutions in Virginia.

Transfer articulation agreements and course equivalency guides provide insufficient assurance that students will receive program credit for courses

While transfer articulation agreements appear to be useful for some transfer students, many have shortcomings that significantly limit their use. Some agreements are four or more years old. Given that curricula at community colleges and four-year institutions can change every few years, these agreements may no longer accurately list the community college courses needed to satisfy the prerequisites for a given major. In addition, many articulation agreements do not explicitly state whether community college courses will be accepted as program credit or elective credit. Many are also not clear about whether a student must complete their associate's degree in order to transfer under the articulation agreement. (See Appendix D for examples of transfer articulation agreements.)

Most community colleges and four-year institutions make substantial efforts to assist students with their transfer options, in part because the variability and complexity of the various agreements leads to confusion and uninformed decisions. Most community colleges responding to the JLARC staff survey reported within the last two years

- holding informational events for students interested in transferring,
- designating specific advising staff to assist prospective transfer students,
- arranging for students to visit four-year institutions, and
- connecting students with faculty or advisers at four-year institutions.

Several four-year institutions also provide online course equivalency guides that indicate, for a given community college course, the equivalent course at the four-year institution. In interviews, staff of four-year institutions reported visiting community colleges and, in some cases, providing transfer advisers on the community college campus for weekly advising sessions.

VCCS and SCHEV are currently collaborating to develop "program maps" that more clearly specify the community college courses required to transfer into a particular program. As envisioned by VCCS system office staff, the program maps would be unique to the community college and four-year institution involved in a given transfer pathway. The maps would guarantee the students' admission into the program if certain academic standards were met, such as a minimum GPA in general education and prerequisite courses. Tennessee makes extensive use of such program maps through its Tennessee Transfer Pathway program. The program includes dozens of transfer pathway guides that guarantee admission into specific programs at a four-year institution for students who complete all required associate's degree courses at their community college.

The development of program maps in Virginia could improve the ability of community college students to transfer to their chosen program and four-year institution while ensuring that community college credits transfer toward their program. For qualifying students, the maps would use an easily understood format to guarantee admission to a particular program and the full transfer of community college credits to the fouryear institution. Many of the transfer articulation agreements used in Virginia lay out the corresponding courses at a given community college and four-year institution, but do not explicitly guarantee that credits will transfer or students will be admitted to the four-year program.

Given these potential benefits, the General Assembly could require VCCS and public four-year institutions in Virginia to develop program maps. The Code of Virginia (§ 23.1-907.D) requires SCHEV to provide guidelines for the development of guaranteed admission and transfer articulation agreements and also requires SCHEV to serve as the coordinating council for the state's public institutions of higher education. In this capacity, SCHEV could specify which transfer pathways should be supported by program maps and the content of maps. Developing effective programs maps can require considerable time and effort because faculty from the participating community college and four-year institution need to agree on a curriculum for associate's degree courses and courses in the program. The General Assembly could require that program maps be developed only for the most commonly used transfer pathways.

The 2017 General Assembly passed legislation to improve the transferability of community college courses to four-year institutions (sidebar). Senate Bill 1234 requires the development of a standard list of general education courses guaranteed to transfer from community colleges to four-year institutions. SCHEV is creating a task force to implement this legislative initiative, as well as the requirements of House Bill 1662 described earlier in this chapter. The recommendations below could be implemented as part of the task force's efforts.

RECOMMENDATION 13

The General Assembly may wish to amend the Code of Virginia to require the State Council of Higher Education for Virginia to develop guidelines for the state's public two- and four-year higher education institutions to follow in developing program maps for transfer pathways. These guidelines should specify (i) the most commonly used transfer pathways for which program maps should be developed and (ii) standard content to be included in each program map. The 2017 General Assembly passed SB1234 requiring the development of a **passport credit program** by July 1, 2020. The program will consist of uniform standards and competencies for general education courses guaranteed to transfer from community colleges to four-year institutions.

The General Assembly may wish to amend the Code of Virginia to require that each public four-year institution in Virginia develop, in collaboration with the Virginia Community College System, program maps for transfer pathways. The program maps should be consistent with the recommended guidelines to be developed by the State Council of Higher Education for Virginia.

Developing the program maps described in recommendations 13 and 14 may diminish the need for guaranteed admissions agreements, and this should be evaluated as part of the development of program maps.

Guaranteed admissions agreements benefit a minority of transfer students

Guaranteed admission agreements are foundational to the effectiveness of the transfer strategy and minimizing the costs of achieving a four-year degree because they guarantee students admission to a four-year institution without going through the competitive admissions process. However, it appears that a majority of students who transfer to a four-year institution do not meet the terms of the agreements. Most four-year institutions are not regularly tracking the percentage of VCCS students who transfer under a guaranteed admissions agreement, but interviews with four-year institutions suggest that less than one-fourth of students transfer under these agreements. According to staff of one four-year institution, just 25 percent of students who transfer from community college use the guaranteed admissions agreement. Staff at another four-year institution estimated no more than 20 percent of transfer students use the agreements. Two other four-year institutions characterized the percentage as "small." All agreements require students to have completed an associate's degree, and most agreements have restrictions that allow four-year institutions to maintain their admissions standards through a minimum GPA for community college courses, which ranges from 3.6 for the College of William and Mary to 2.0 for three four-year institutions. Many community college students who transfer do not meet these two requirements and therefore do not transfer under a guaranteed admissions agreement.

The relatively low percentage of students who transfer under guaranteed admissions agreements appears to reflect the small percentage of students who earn their associate's degree before transferring. According to SCHEV data, in recent years the percentage of students who transfer with their associate's degree has ranged from 23 to 32 percent. SCHEV is currently developing guidelines that would require four-year institutions to develop policies for providing guaranteed admission to community college students who have earned community college credits but have not received an associate's degree.

Students using guaranteed admissions agreements may still need to take additional prerequisite courses after transferring

Most guaranteed admission agreements include provisions that students may need to take additional courses within or outside their program or major after transferring.

Four agreements stipulate that the transfer-oriented associate's degree fulfills the general education requirements of the four-year institution but may not fulfill specific departmental requirements or requirements for a student's major. One guaranteed admission agreement specifies additional courses students need to complete in order to satisfy general education requirements. The College of William and Mary requires that students who transfer with an associate's degree must complete an additional nine credits of lower-division courses at the college, including courses in foreign language and arts proficiency.

Transfer resources are not well organized or readily accessible to students

There is no single, accessible repository for transfer agreements and other resources available to transfer students and their advisers. As a result, it can be difficult and timeconsuming for community college students and their advisers to find information about transferring to a four-year institution. Transfer agreements, course equivalency guides, and general information about transfer are maintained on numerous websites, including the Virginia Education Wizard (sidebar) and websites for the 38 individual two- and four-year institutions. For these reasons, the total number of transfer agreements currently in effect is not known.

The Code of Virginia requires SCHEV to develop a state transfer tool students can use to determine whether specific community college courses will transfer to fouryear institutions (§ 23.1-908.A-B). However, according to SCHEV staff, the online tool has not been functional for more than six months and has been difficult to maintain because four-year institutions do not consistently provide their transfer agreements to SCHEV as required by the agency's guidelines for transfer agreements. As a centrally governed community college system, VCCS regularly receives transfer agreements from the community colleges. The Virginia Education Wizard contains the guaranteed admissions agreements and many of the transfer articulation agreements that have been developed. VCCS could be given statutory responsibility for building and maintaining the state's central repository for all agreements, course equivalency tools, and other transfer information. VCCS could use the Wizard or another website as a repository. The General Assembly could then direct public fouryear institutions to regularly submit to VCCS their guaranteed admissions and transfer articulation agreements, course equivalency tools, and any other transfer information they provide students.

The Virginia Education Wizard is a website maintained by VCCS that provides a broad range of information about pursuing higher education and a career path. Part of the website is dedicated to resources and information for transfer students.

The General Assembly may wish to amend § 23.1-908 of the Code of Virginia as follows: (i) to require that the Virginia Community College System (VCCS) develop and maintain an online single repository for all agreements, course equivalency tools, and other informational resources related to transferring from a community college to a public four-year institution; (ii) to require the State Council of Higher Education for Virginia to send to VCCS all the transfer resources that it has collected; and (iii) to require all public four-year institutions to keep their transfer agreements updated and annually send to VCCS all new and revised transfer agreements and other transfer-related resources.

Lack of information about transfer student outcomes hinders improvement

Data currently collected by VCCS and SCHEV are not sufficient to determine whether community college credits are being counted toward bachelor's degree requirements. This information is needed to determine the effectiveness of transfer policies, and could be captured in the student-level data that is maintained by VCCS and SCHEV. One of the challenges of such an effort would be determining whether community college credits earned by students who attain their bachelor's degree are counted toward the student's major, given the tendency of students to change majors. At a minimum, however, SCHEV and VCCS could begin tracking whether community college credits are accepted for credit by four-year institutions.

Other information important to evaluating the state's transfer policies is collected but not consistently analyzed. As a result, it is difficult to determine in which particular transfer pathway (sidebar) the transfer process is least effective for students, the reasons it is not effective, and how it could be improved. SCHEV is consistently tracking completion rates and time taken to complete a degree and prepares an annual report and summaries of this information for each community college and public four-year institution. However, SCHEV does not regularly analyze information about the total number of credits transfer students accumulate while earning their bachelor's degree, or their academic performance after transferring to four-year institutions. The VCCS system office also does not analyze this information, and it is not consistently shared by community colleges and four-year institutions.

Collecting and analyzing more comprehensive information about transfer students would enable the state to better determine the reasons the transfer process does not work well for some students and how it can be improved. Existing data collected by SCHEV could be analyzed in greater detail to determine which transfer pathways correlate to lower rates of student success—lower completion rates, longer completion times, more credits accumulated, and lower grades. This information could be incorporated into SCHEV's annual transfer reports and shared with community colleges and four-year institutions where transfer students are not faring well. Institutions could use the information to identify the factors driving low rates of student success, such

A transfer pathway is a student's unique educational pathway from community college to a four-year institution. For example, a student earns an associate's degree in science at Piedmont Virginia Community College and transfers to the University of Virginia to complete a bachelor's degree in mechanical engineering. as not choosing a career path and four-year institution early enough, not receiving program credit for courses, or not performing well academically after transfer.

Building SCHEV's capacity to conduct a more comprehensive and detailed analysis of transfer students would be more efficient than employing staff for additional analysis at individual community colleges. SCHEV currently has two full-time staff whose responsibilities include analyzing progress and outcomes data for transfer students. SCHEV would likely need one additional full-time staff to perform a more comprehensive and detailed analysis of transfer records.

RECOMMENDATION 16

The General Assembly may wish to consider amending the Code of Virginia to require that the State Council of Higher Education for Virginia (SCHEV) annually identify the transfer pathways in which transfer students have poorer outcomes, as measured by lower completion rates, longer time to degree, more credits accumulated, and lower course grades. This information should be reported at the end of every academic year, beginning with the 2017-18 academic year, be shared with individual community colleges and four-year institutions, and be used to identify community college courses that are not routinely accepted for credit by the state's public four-year higher education institutions.



September 2017



Operations and Performance of the Virginia Community College System

Commission Briefing

Study mandate

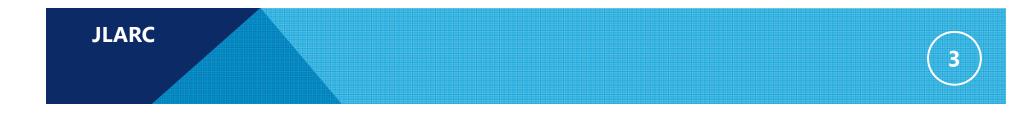
- JLARC to review the Virginia Community College System (VCCS), including
 - Success and affordability of academic and workforce programs
 - Alignment with K-12 school divisions and four-year institutions
 - System office support for colleges
 - Spending and allocation of funds

House Joint Resolution 157 (2016)



Research activities

- Data analysis
 - Student outcomes and debt
 - Tuition and fees
 - College and system office spending
- Structured interviews
 - Staff at community colleges and VCCS system office
 - Staff at four-year institutions and SCHEV
 - K-12 school division staff
- Surveys of community college and VCCS system office staff
- Document and literature reviews



In this presentation

Background

Student success

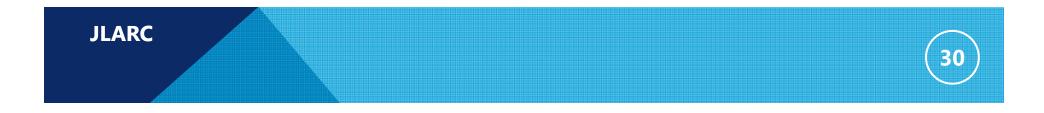
Dual enrollment program

College transfer policies

Community college affordability

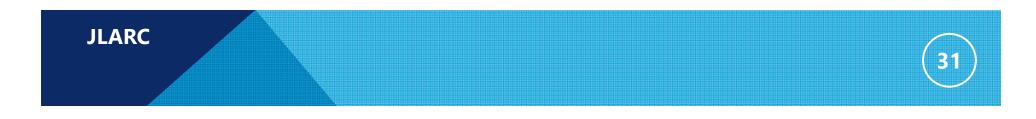
VCCS structure

Workforce development programs



Dual enrollment allows high school students to earn college credit

- Two key objectives of dual enrollment
 - Increase postsecondary enrollment and degree attainment
 - Decrease cost and time to earn degree
- Most courses provided by VCCS and taught in high schools
- 33,700 students took dual enrollment courses in fall 2016



Findings

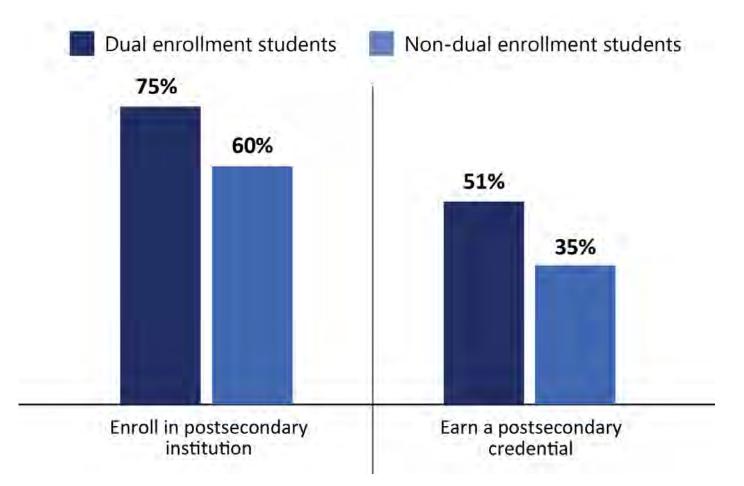
Higher proportion of dual enrollment students attend college and earn credentials.

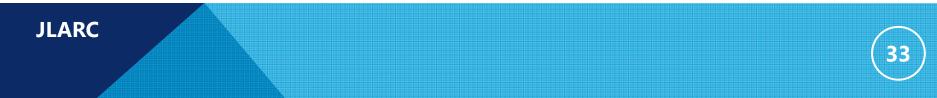
Dual enrollment reduces the time and cost of a credential for community college students.

However, dual enrollment does not clearly reduce time and cost for students who go directly to four-year institutions.



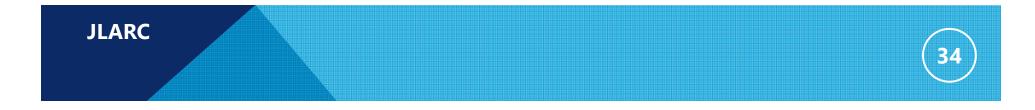
Higher proportion of dual enrollment students enroll in college and earn credentials



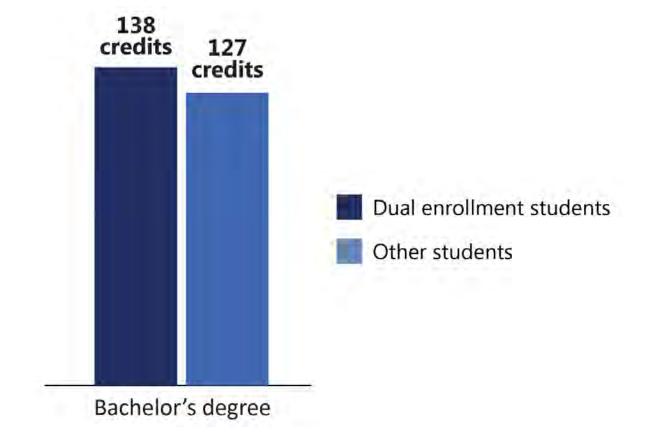


Dual enrollment reduces time and cost for students directly entering community college

- Compared to non-dual enrollment students, dual enrollment students
 - take 1 less semester to earn associate's and bachelor's degrees
 - accumulate similar number of credits to earn associate's and bachelor's degrees



Dual enrollment does not reduce time and cost for students who go directly to four-year institutions



Note: 55% of dual enrollment students enter four-year institutions directly from high school.



Four-year institutions are reluctant to accept dual enrollment credits

 Four-year institutions express concerns about quality and content of dual enrollment courses

"Students whose dual enrollment course work was taken solely in high school were not prepared for [college-level] course work." – University staff

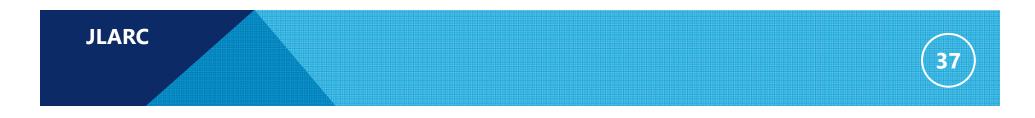
 Community colleges report student difficulties transferring dual enrollment credits

"Some [four-year] colleges do not want to accept dual enrollment courses as transfer." – Community college staff



Colleges do not consistently use quality assurance practices for dual enrollment courses

- Staff at 16 community colleges reported difficulty ensuring the quality of dual enrollment courses
- Colleges do not consistently use nationally recommended quality assurance practices
 - Classroom observations not consistently conducted by half of colleges
 - Instructor performance not consistently evaluated by one-third of colleges

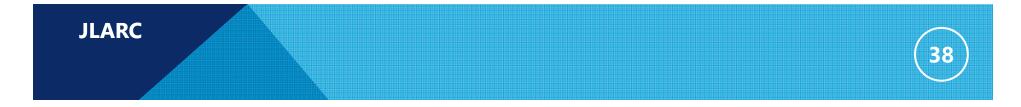


Recommendations

The General Assembly may wish to consider requiring public four-year institutions to annually report data that would allow VCCS and SCHEV to identify dual enrollment courses that are not accepted for credit.

VCCS should coordinate with VDOE to require that community colleges use recommended practices to ensure dual enrollment courses are high-quality:

- Review of course materials
- Instructor evaluations
- Classroom observations



In this presentation

Background

Student success

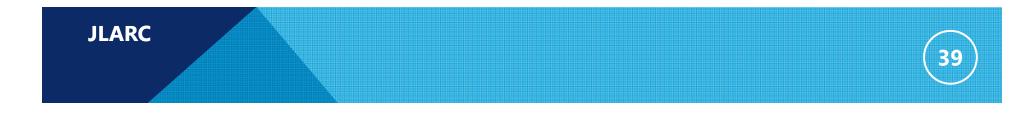
Dual enrollment program

College transfer policies

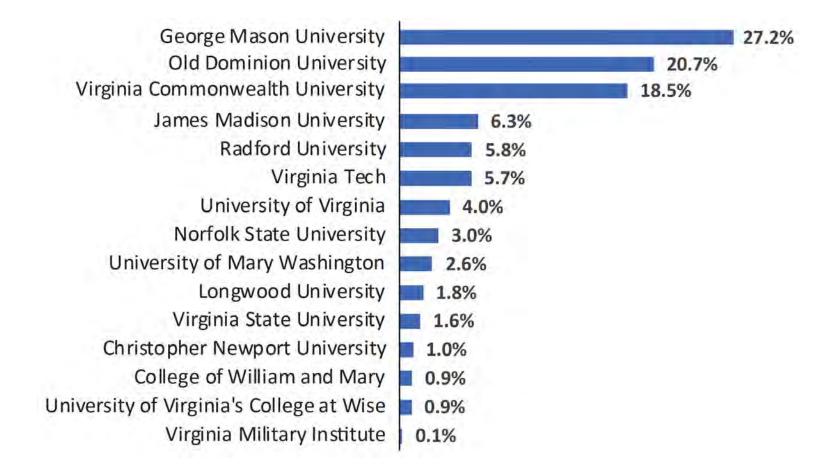
Community college affordability

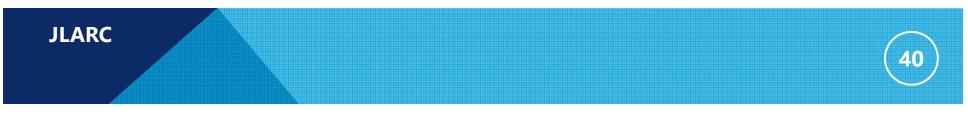
VCCS structure

Workforce development programs



Two-thirds of transfer students go to GMU, ODU, or VCU





Two types of agreements set conditions for student transfer

Type of agreement	Description
Guaranteed admission agreement	Guarantees admission to a 4-year institution
Transfer articulation agreement	Informs students about the transferability of community college courses toward 4-year institutions' bachelor's degree requirements

 Both types of agreements stipulate certain requirements that must be met in order for a student to qualify

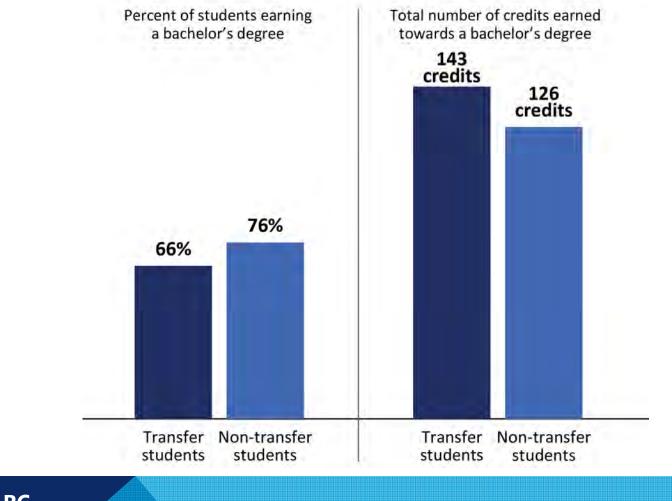


Finding

Students are not fully realizing transfer benefits because the transfer process and resources are difficult to use.



Transfer students earn bachelor's degrees at lower rates and accumulate more credits

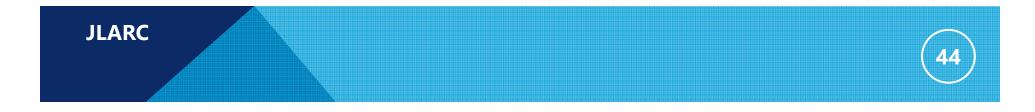




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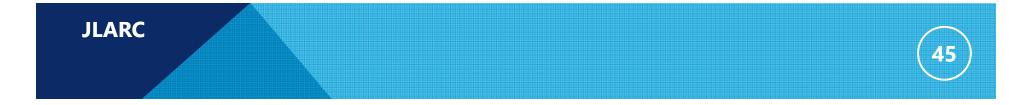
Transfer resources are not easily accessible

- Transfer agreements have proliferated
 - 338 identified
 - Total number unknown
- Transfer resources maintained on multiple websites
 - Difficult for community college students and advisers to find resources



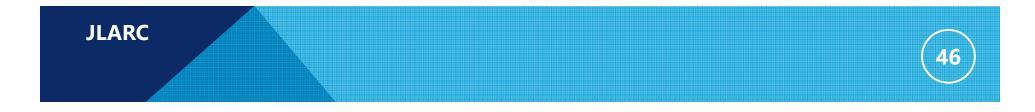
Recommendation

The General Assembly may wish to consider requiring VCCS to maintain a single online repository for all transfer resources, including agreements.



Transfer articulation agreements are difficult to use

- Agreements do not always indicate whether community college credits will be applied to bachelor's degree requirements
- Some agreements are outdated
- Students may discover that some credits were not applied to degree requirements



Recommendations

The General Assembly may wish to consider requiring fouryear institutions and community colleges to develop more useful transfer agreements consistent with guidelines set by SCHEV.

The General Assembly may wish to consider requiring fouryear institutions to keep transfer agreements up-to-date.

