

2023 Transfer Improvement Landscape Scan

SØVA

Goals, Methodology, and Caveats

- The purpose of this brief is to inform and encourage policymakers, higher education institutions, advocates, and funders to take more thoughtful and bolder approaches to improving opportunities and outcomes for transfer students.
- The project team reviewed 45 research papers, state reports, and policy documents to gain insight into the critical metrics associated with effective transfer, evidence of the effectiveness of policies and practices for achieving equitable outcomes for transfer students, and possible states, systems, and institutions to study in more depth for the project.¹
- The team conducted 30 interviews with national, state, system, and institutional leaders with deep knowledge of transfer.
- Transfer is a term that denotes a complicated ecosystem, with students moving into, out
 of, and across community colleges and universities. This project focused specifically on
 the more traditional vertical transfer of students from community colleges to universities.
 We set this focus for the project for three reasons:
 - First, learners from low-income backgrounds and communities of color are overrepresented at community colleges, and most community college students intend to earn at least a bachelor's degree.
 - Second, the inequities in opportunities and outcomes for these learners are evident and egregious when it comes to credit mobility, transfer, and recognition of learning.
 - Third, despite the widespread focus on short-term credentials, micro-credentials, and job training certificates, baccalaureate attainment remains indispensable for closing the wealth gap that educational institutions and systems have co-created and tacitly reinforced. For those committed to achieving fairness in education, the goal of wealth creation and upward mobility for disenfranchised learners is a broader, longer-term goal than job placement and career success goals. While short-term credentials for career success are an important area of focus, lowering barriers to equitable attainment of baccalaureate and advanced degrees is an indispensable piece of the fairness puzzle. Cracking open credit mobility, transfer, and recognition of learning is a vital and promising strategy for ensuring all learners have a fair shot at achieving the credentials correlated with wealth creation.



¹ For more detail see the full version of this report.

- We note, at various points in this work, the importance of focusing on labor-market outcomes for credentials and encourage transfer advocates to center labor-market outcomes in all future work on transfer and postsecondary attainment. The relationship between access to programs of study in high-paying fields, credit mobility and transfer, baccalaureate attainment and wealth creation for learners from low-income backgrounds is complex. Focusing on credential attainment alone is insufficient.²
- Sova approaches this work with the conviction that the commitment to fair treatment of students must include the centering of student voice and experience. While the scope of this project did not include deep listening to students, we included in our scan both secondary research on student voice in transfer as well as insights gleaned from the hundreds of interviews and focus groups the Sova team has conducted with transfer students over the last decade.
- We do not use the shorthand of *two-year* and *four-year* institutions to describe the vertical transfer landscape, opting instead for *community colleges* (ccs) and *universities* (unis). We do this to contribute, in one small way, to the necessary detangling of learning from seat time and to acknowledge that the credit hour was not designed to serve as a proxy for learning.³ The assumption that a bachelor's degree takes four years to complete is out of step with the expectations and needs of today's learners, and the use of *two-year* and *four-year* framing unhelpfully centers the process (time spent) rather than the outcomes (degrees earned). With small language adjustments, we hope to center students and their interests rather than the interests of institutions.



² William R. Emmons, Lowell R. Ricketts, "Unequal Degrees of Affluence: Racial and Ethnic Wealth Differences across Education Levels," *Regional Economist* (Federal Reserve Bank of St. Louis, 2016), <u>https://www.stlouisfed.org/publications/regional-economist/october-2016/unequal-degrees-of-affluence-racialand-ethnic-wealth-differences-across-education-levels</u>

³ Amy Laitinen, *Cracking the Credit Hour* (New America Foundation and Education Sector, 2012), <u>https://www.newamerica.org/education-policy/policy-papers/cracking-the-credit-hour/</u>

Landscape Scan Findings

Lack of Disaggregated Data Hides Impact of Reforms on Key Populations

- State- and system-level data provide few insights on transfer.
- Highly recognized transfer programs have not disaggregated data.⁴

Evidence on Commonly Implemented Reforms is Thin and Conflicting

- Transfer and articulation agreements have not leveled the playing field for students.⁵
- Transfer pathways (program maps and transfer advising) are insufficient for achieving equitable transfer outcomes.⁶
- Promoting or requiring AA/AS completion shows mixed results thus far.
- Layering advising improvement efforts on top of overly complex systems that were not designed for students or advisors has limited returns.

Research Shows Barriers to Transfer Exist Within and Across Sectors

- Lack of enrollment and access to a transfer pathway undermines fair treatment of underserved learners who begin at community colleges.⁷ At community colleges, lack of first-year momentum delays or stops transfer progress (traditional remediation continues to serve as an invidious sorting mechanism by design).⁸
- Many students who have completed transfer agreements fail to apply for transfer.⁹
- Standard approaches to credit evaluation are deeply and inherently inequitable and biased.¹⁰
- Many transfer students are not accepted into their preferred institution or program.¹¹
- Financial shock greets students upon transfer to universities.¹²

⁷ Campaign for College Opportunity, Chutes or Ladders? Strengthening California Community College Transfers: Progress and Barriers, research brief, June 2021; Tennessee Higher Education Commission, Articulation and Transfer in Tennessee Higher Education, 2022; Wootan, G., 2021 Washington transfer associate degree effectiveness update, February 2021.

⁸ H. Johnson and M. Cuellar Mejia, *Increasing Community College Transfers: Progress and Barriers*, research brief (Public Policy Institute of California, 2020).



⁴ Florida International University, Northern Virginia Community College, University of Central Florida, and Bakersfield College interviews.

⁵ RP Group, "Mapping the Transfer Landscape for California Community College Students," *Through the Gate Transfer Study*, 2017; Tennessee Higher Education Commission, *Articulation and Transfer in Tennessee Higher Education*, 2022; and G. Wootan, 2021 Washington transfer associate degree effectiveness update, February 2021.

⁶ RP Group, "Mapping the Transfer Landscape for California Community College Students," *Through the Gate Transfer Study*, research brief, 2017.

⁹ Lin, Y. et al, *Stratified Trajectories: Charting Equity Gaps in Program Pathways Among Community College Students,* research brief, (Community College Research Center, 2020).

¹⁰ David B. Monaghan & Paul Attewell, "The Community College Route to a Bachelor's Degree," *Educational Evaluation and Policy Analysis* 37, no. 1 (2015): 70–91.

¹¹ H. Johnson and M. Cuellar Mejia, *Increasing Community College Transfers: Progress and Barriers*, research brief (Public Policy Institute of California, 2020).

¹² Alamo College District and Florida International University interviews.

Takeaways

- There are no silver bullets or easy answers when it comes to achieving fair treatment of transfer students because our systems were built to serve institutions and disciplines rather than students, and changing this is difficult work that requires long-term commitment, stamina, optimism, and a high tolerance for pain.
- We can tweak practices all day long, but if we do not fix the complexity of the underlying system and the incentive structures that drive institutional behavior we will continue to fall short and students from historically marginalized communities will continue to be undermined.
- Current conditions and incentives reinforce rather than challenge the structural inequities that created a system that places unfair barriers at every step on the path of baccalaureate-seeking community college students.
- Without changing the conditions in which institutions operate and the assumptions they make about students, we will continue to see meager results around practice-based improvement efforts. We need to stop accepting the status quo because the status quo is positively harmful to the growing share of today's "new traditional" learners, including first-generation college goers and learners from low-income backgrounds.
- Achieving fair treatment of today's learners requires pairing a focus on baccalaureate attainment with a focus on the ROI of such attainment, including longer-term labormarket outcomes and long-term wealth creation opportunities by program and field of study.
- Despite the too-slow pace of change in transfer reform efforts of the last twenty years, there is cause for optimism as transfer reform efforts evolve and organizations increasingly center student interests and needs in policy and practice. The combination of diminishing public confidence in the value of higher education, fundamental demographic shifts including declining birthrates and longer lives, and rapid changes in technology will force next-level creativity and commitment from institutions and systems. For those interested in remaking our systems to achieve greater fairness for transfer students, the adage "never let a good crisis go to waste" is a call to action.



Looking Ahead

Shifting Dynamics Create New Opportunities

- Colleges and universities feel new pressure to demonstrate their value to today's learners.¹³
- Amid enrollment declines and demographic shifts, a "transfer market" sensibility is emerging, incentivizing baccalaureate-granting institutions to serve transfer students actively.¹⁴
- Increased bargaining power for students shows potential for shaping institutional behavior.¹⁵

The Most Promising Practices and Policies Will Center Transparency and Adaptability

The Unique Value of Emerging Technologies for Dramatically Increasing Transparency

- Technologies aimed at students (easy navigation, comparison shopping, etc.) hold some promise but have not arrived yet.
- Technologies aimed at systems (algorithmically assisted credit evaluation and credit mobility analysis) have the potential to help galvanize unprecedented will for fundamental reforms, but these are still in the testing phase.

Shifting Incentives to Promote Adaptability

- The field needs improved outcomes-based funding models and new financial incentives (e.g., credit caps that hold institutions accountable rather than students).
- Institutions should tap new and existing reputational incentives (e.g., institutional accreditation, Carnegie Classification for Social and Economic Mobility).

Practices Commonly Referred to as Promising, Contextual Factors, and Policy Considerations

In the table below, we present nine practice improvement areas anecdotally identified in literature and interviews as promising. None of the practices reviewed has strong disaggregated evidence of effectiveness, but this says more about the poor state of data collection and sharing than it does about the long-term effectiveness of any of these



¹³ K. Carey, "The Incredible Sinking Future of College," VOX (November 21, 2022).

¹⁴ Alamo College District, Virginia Commonwealth University, Florida International University, Berkeley City College, and University of Central Florida interviews.

¹⁵ Alamo College District and Berkeley City College interviews.

practices. Given the thin and, in some cases, mixed evidence of effectiveness around the practices commonly referred to as promising, we also provide considerations related to contextual factors relevant related to their implementation, and policy implications. Practices reviewed include:

- ➤ Associate → Bachelor Transfer Guarantees ("2+2")
- Co-Enrollment / Dual Admissions
- Common Course Numbering
- Community College Baccalaureates
- > Course and Program Sharing
- Guided Pathways
- ➢ High School Dual Enrollment → Bachelor Pathway
- Student-Facing Technology Solutions
- > Student-Facing Affordability Improvements

| Commonly Referred to "Promising Practices" | Conditions & Contextual Factors Related to Practices | Policy Elements & Implications of Promising Practices |
|---|---|---|
| <i>Associate > Bachelor / 2+2s</i> | • 2+2 models are the bedrock of first-generation transfer reforms, but evidence about the effectiveness of these approaches is weak in some states. In other states, there is emerging evidence of the value of these arrangements—when done right—for leveling the playing field for students from low-income backgrounds and communities of color who are overrepresented at ccs. Current evidence suggests that aligning the first 60 | Evidence from several states confirms that general associate degrees for transfer (AAs) that are not aligned to a discipline with proven labor market value are harmful to students (low transfer success, scant evidence of ROI). Policy mandates should include attention to funding the infrastructure for maintenance and monitoring of, as well as accountability for, implementation of aligned pathways. |
| | credits of a degree to a program is key. Transparent application of credits in transfer is a must for successful implementation, but this requires a students-first approach to disciplinary dialogue and path creation. Once transfer pathways are built they must be maintained and include built-in accountability because passive noncompliance is the norm. | If carrots are possible, they should be pursued (e.g., funding model adjustments that reward ccs and unis for necessary behavior changes, and technical assistance to reform institutional policies, practices, and processes). Accountability for implementation will be essential for success since passive noncompliance is the norm for policies like these. |
| | • Currently, disaggregated data about transfer student outcomes are very hard to come by (at institutional, system, state, national, and federal levels). Experts have come together to name critical data points for states and others to track (see <u>https://sova.org/wp-</u> content/uploads/2023/01/Beyond-Transfer-Inquiry-Guide-Jan-2023.pdf) | • Students should be default enrolled into clear transfer programs (rather than having to jump hoops). Transfer students already face unfair amounts of conflicting information, new academic requirements, changing financial aid, etc. Boutique programs that are confusing, not guaranteed, create new burdens, etc. are part of the problem. |
| | Pursuit of high-quality associate completion transfer guarantees should not stymie efforts to create multiple onramps for transfer students at different credit thresholds in places where these strategies are more likely to be successful (in the absence of the supportive policy environment required for strong implementation). In some contexts and conditions, students who want to get a bachelor's degree may be better served by transferring as early as possible. Associate degree-dependent transfer agreements should not harm a student who | Disaggregated data should be collected to determine equitable access and success of programs. Effective elements of implementation that policy might support include: Tuition guarantees/upper division scholarships, Guaranteed junior standing with clear definitions of junior standing tied to transparency about credit accumulation (goal is for transfer students to graduate with the same number of credits as their first-time-full-time peers), Application of math taken at ccs to programs of study at unis honoring |

Co-enrollment/ dual admissions (community colleges & universities)

- Co-enrollment is a common feature of some of the most recognized transfer-oriented ccs and unis.
- Many students seek to transfer to unis where they live, making coenrollment an attractive option for many cc students.
- There is little research documenting whether co-enrollment leads to equitable access to unis and equitable outcomes for students.
- Because it requires ongoing collaboration between cc and unis, coenrollment becomes resource-intensive to build and sustain.
- Institutions that run co-enrollment programs do not have reliable resources and rely on a single committed staff member who manages programs, which undermines sustainability.¹⁶
- The *how* of this work matters, it should be accompanied by specific recommendations around design and implementation (e.g., careful attention to design features that integrate advising and promote a sense of belonging at the uni from the moment of enrollment at the cc). For example, access to libraries, sporting events, faculty, and advisors at the uni from the first day of enrollment at the cc and connecting to culturally responsive advising that reinforces a student's sense of self-efficacy is vital.¹⁷

- Program and system policies should provide multiple access points for full transfer to unis after each semester of co-enrollment.
- Tuition and fees should be calibrated to cc rates while co-enrolled and ideally throughout the full learning journey.
- Institutions should continuously collect and analyze disaggregated data that measures student outcomes and sense of belonging to drive continuous improvement.
- Policy efforts should include funded research focused on understanding the most influential elements of co-enrollment, design and implementation principles, and processes for ensuring equitable outcomes.

¹⁶ Florida International University interview.

¹⁷ Alamo College District, Florida International University, and University of Central Florida interviews.

| <i>Common Course</i> <i>Numbering</i> | Viewed by many as a building block of equitable treatment of students.¹⁸ Evidence suggests this is an enormously contentious undertaking and that it is far easier to do this poorly rather than well. When it is done poorly, it harms students by unnecessarily raising course expectations and complicates access to programs of study. Attention to implementation is critical to success. Long-standing assumptions about the meaning of faculty ownership of the curriculum conspire to make this slow and painful work. | Course numbering policy should include both ccs and unis. Governing bodies should provide resources and other support to implement common course numbering legislation. State or system policy should articulate a realistic time frame (5–7 years). Policy should dictate that common course numbered courses meet general education requirements or apply toward programs of study at receiving institutions. Policy should institute accountability mechanisms to ensure common numbered courses are accepted for both general education and program requirements. |
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| Community College Baccalaureates (CCB) | This may indeed be a promising practice for some subpopulations of students (e.g., place-bound, rurally located, adult learners, etc.), but today's students are highly mobile, so solutions aimed at keeping them at one college will inevitably fail to serve a large proportion of students. Some report the potential of unintended consequences related to unis becoming even more hostile to ccs as competitors rather than collaborators (though the reality is that they are behaving as competitors already by virtue of their business models). CCBs still center the institution rather than the portability of learning. CCBs can be a viable pathway to a bachelor's degree for students in career and technical programs where course credits or non-credit courses that are not typically transferable can be applied to a CCB. | Policy to enable CCBs should not unnecessarily offer programs that are otherwise available at nearby unis unless the evidence is clear that students are not being treated equitably by the uni. Policies should first prioritize strong collaboration across partners (e.g., shared space and services infrastructure, interweaving resources committed by both ccs and unis to offer uni degrees at ccs or to build shared programs), before resorting to CCBs that might be viewed as duplicative. Unis should not be allowed to undermine state transfer agreements as a reaction to CCBs. CCBs should be designed to ensure access to bachelor's degrees for students from CTE or non-credit trending programs. |

¹⁸ Florida International University interview.

| <i>Course and Program Sharing (across community colleges and universities)</i> | There is a strong need for systems within a state to increase seamless course sharing and program sharing across institutions and sectors to: Ensure that students can access courses when they need them, Ensure that geographically isolated students have access to baccalaureate degrees, and Establish the infrastructure and revenue-sharing models required to increase equitable access and opportunity for baccalaureate attainment. Innovation in course sharing and program sharing is happening in pockets and progress is slow because of complex back-office systems that are difficult to align, faculty anxiety about loss of courses, concerns about revenue sharing and fee structure, and the relative immaturity of longer-term business planning by institutions departments. Centering student experience (student journey mapping that segues into process mapping) is an essential contextual piece of the puzzle. | System policy must address and resource the back-office IT and process reforms required to systematize course and program sharing. System policy work should occur in tandem with practice improvement efforts and should link with learning from informal course sharing already happening within most systems. System policy must address revenue sharing model or approach to sharing courses and programs. Shared programs should be designed to allow access to high-demand, high-paying jobs located in other regions. (e.g., Georgia Nexus Degrees). Shared program design should consider work-based learning, internships, or other programming to expand access to careers and to increase employer confidence in the capacity of public institutions to produce workforce-ready graduates. |
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| <i>Guided Pathways</i> (Loss & Momentum Framework reforms including program mapping and advising redesign) | Many first-generation pathways colleges conducted initial program mapping without sound design principles or consideration of baccalaureate attainment as the goal for most students. Poor design led to bloated cc program requirements and created more barriers to seamless transfer. Early pathways work focused on intrusive advising instead of a strengths-based view of students and student supports, and therefore prioritized monitoring student plans over promoting a sense of belonging, mattering, purpose, and efficacy for students. In some cases, this reinforced rather than dismantled a deficit view of students. Poor implementation of early alert technologies, grounded in a deficit view of students, was common in the first generation of guided pathways include attention to both | Policy should address scaled reform of remediation (corequisite default for all, placement reform, and math pathways) and connect the dots between remediation/math reform and equitable transfer student success. Policy should ensure equitable access to pathways within and across institutions. State- and system-level policy should prioritize funding implementation of high-impact practices within pathways aligned with programs of study. State, system, and institutional policy should prioritize disaggregated data to track enrollments of transfer students into programs of study linked to high-paying, high-demand jobs. Institutional policies related to guided pathways should center student experiences and prioritize students' interests over the interests of departments and divisions. |

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| | proactive/sustained advising and culturally competent/strengths-based advising. Increasingly the uni sector is paying attention to and seeking to implement pathways practices. | |
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| Dual Enrollment (high school → bachelor degrees) | Dual credit students are proving to be an important source of new enrollments at ccs. Enrollments from dual credits have countered drops in cc enrollments among students.¹⁹ Ccs are tapping this market to provide yet another path to a bachelor's degree, but it does not appear to be working well in practice yet. Access to dual credit and enrollment into dual credit is inequitable due to the lack of offerings in under-resourced schools.²⁰ Research suggests dual enrollment is costly for colleges and that much work must be done to help these programs be structured in ways that allow them to serve, in practice, as a vehicle for shortening time to a bachelor's degree.²¹ There is a great deal of work yet to be done to ensure dual credit is equitably accessible and indeed designed to serve as a path to a bachelor's degree. Dual enrollment efforts will be aligned to pathways and the high school portion of work will represent meaningful progress toward a baccalaureate and guarantee seamless transfer. "Just in time: academic supports are important for dual enrollment students, just as they're important for first-time full-time students. | State policy and resources should ensure that all high schools have robust dual credit programs and affiliated programs to facilitate access to and success in a student's chosen program of study. Dual credit courses should have the full weight of traditional college credits when it comes to transfer and acceptance of credits toward requirements for programs of study. Dual enrollment policy efforts will ensure: Completion of the high school portion of the coursework earns students a credential that holds workforce value and represents meaningful progress toward a baccalaureate, Opportunity youth are involved and elevated as leaders in the process to create dual enrollment pathways that will serve them best, including determining the optimal locations and modality for course delivery, Relevant employers inform the creation of the dual enrollment pathways and commit to hiring opportunity youth who complete credentials through the pathways.²² |

 ¹⁹ L. Know, "Can High Schoolers Save the Community College?" *Inside Higher Ed* (November 21, 2022).
 ²⁰ https://edtrust.org/the-equity-line/6-ways-to-make-dual-enrollment-programs-equitable/
 ²¹ S. Weissman, "Dual Enrollment Comes at a Cost" *Inside Higher Ed* (February 15, 2023)

²² Vanessa Keadle, Student Ready Strategies interview.

| Student-facing technology solutions | Making credit mobility and evaluation transparent to students and leaders is far more promising than promoting any given technology (e.g., Transferology). The most implemented technology solutions are "portals" that often overwhelm students with far too much information and hyperlinks that are not in any way personalized.²³ Throwing money at technology without careful attention to conditions for effective implementation causes most technologies to fall short of their intended outcomes and, in some cases, harm students (a perennial contextual factor is the real danger of wishful thinking when it comes to technology). Some evidence shows that increased transparency generated from technology-based systems has improved institutional responsiveness to facilitating successful transfer and other supports for students.²⁴ | Legislative appropriations should address system-facing technology aimed at increasing transparency of credit mobility for institutions and students. State and system policy should require institutions to address revealed bottlenecks and dropped credits. System policy related to technology should include analytics systems to track credit loss and other barriers to successful transfer. Policy should aim to create a responsive system over the long term that can generate customized and clear degree plans for students.²⁵ State investments to construct, maintain, and evolve systems are necessary to scale statewide.²⁶ |
|--|---|--|
| <i>Student-facing affordability improvements</i> | Transfer students do not have fair or equal access to state or institutional financial aid. Despite broad understanding of the financial barriers to transfer, only three states have aid programs that specifically target transfer students. State and institutional policies and practices that undermine transfer student access (e.g., privileging students who are full-time or known by departments or faculty).²⁷ | State aid and institutional scholarship programs should support transfer students to ensure continuity of aid throughout the program of study and to mitigate increased tuition, fees, and textbook costs associated with enrollment at unis.²⁸ Aid programs should be measured against disaggregated data on percent of unmet need covered by receiving institution. Policy design should include financial aid experts at the table and evaluations to understand the impact and to mitigate against unintended negative consequences. |

²³ Bakersfield College, Central Valley Higher Education Consortium, and Transfer Virginia interviews.

²⁴ Alamo College District interview.

²⁵ CUNY interview.

²⁶ Transfer Virginia and Bakersfield College interviews. ²⁷ Beyond Transfer Policy Advisory Board, Affordability Disconnects: Understanding Student Affordability in the Transfer and Credit Mobility Era, (Sova, 2023), https://sova.org/wp-content/uploads/2023/02/SOVA-Beyond-Transfer-Affordability-Disconnects-Feb-2023.pdf

²⁸ Massachusetts Department of Higher Education interview.

Transfer Policies by Level

The table below captures a preliminary summary of potential policy levers.

| State | System / Institution | Accreditation | Federal |
|---|---|--|--|
| A foundational set of necessary but insufficient policies (see Appendix for Florida's <i>double- click</i> example) Credit for prior learning Scaled reform of remediation State aid programs targeting transfers Next-level, outcomes-based funding Credit evaluation policies and credit caps that focus on institutional accountability rather than student responsibility Funding robust data sharing and accountability Policy focused on requiring effective implementation of 2+2 through structural reforms and accountability | Scaled reform of remediation/math applicability Reform of transcript/credit evaluation practices (elevating decision-making to administration, requiring clear reason giving for all credits not applied, etc.) Program sharing/ course sharing Data infrastructure and capacity | Stronger statements (guidance and policy) on credit mobility and its relationship to equitable attainment, institutional effectiveness, and quality. Use of transfer- focused discussion and inquiry guides in site visits. Data systems and support (e.g., WSCUC "Better Conversations, Better Data" initiative). | Title IV good governance implications and federal legislative efforts may flow from the results of the AI work in credit mobility (i.e., as inequities in credit mobility become transparent through the application of technologies, it is reasonable to expect the feds—via pressure on accreditors and Title VI policy—to begin signaling that they will not pay twice for credits that should have been accepted and applied.) Next-level data work to support greater transparency and accountability. |

Recommendations

Examples of promising practices

- 1. Scale reform of remediation to ensure students can access and complete gateway courses before transfer and to guarantee applicability of the math credit to programs of study at the receiving institution.
- 2. Offer multiple access points for transfer and programs to support transfer at each point (e.g., offer programs with transfer after two, three, and four semesters with tuition guarantees and upper-division scholarships for each onramp). Where a supportive policy environment exists for effective design and implementation, pursue guaranteed associate degree > baccalaureate pathways.
- 3. Create truly robust and equitable co-enrollment with meaningful pathways starting in high school (seamless K–12/cc dual enrollment and community college/university co-enrollment linked from high school to grad school).
- 4. Scale evidence-based, culturally responsive, and responsible pedagogy and advising that honors the experiences and meets the needs of today's students.
- 5. Use algorithmically assisted credit evaluation, articulation, and credit mobility analysis to create transparency for students and policymakers, and to move toward default application of credits in transfer.

Examples of Promising Areas of Policy

- 1. Design and employ next-level financial incentives that drive to the root of institutional behavior (e.g., better outcomes-based funding models, credit caps that hold institutions not students accountable). (*federal, state, system*)
- 2. Implement system and state policies (built on solid data infrastructure) to promote seamless course and program sharing for students moving between institutions within and across public systems. (*system, state*)
- 3. Mandate the inclusion of high-quality credit for prior learning assessment as a default part of the onboarding of all new and returning students (e.g., veterans should have their learning recognized as progress toward credentials and not just deemed elective). (*state, system*)
- 4. Encourage and elevate accreditation policy that meaningfully includes attention to credit mobility and transfer as integral to institutional effectiveness, and lean on accreditation in mandating a default of honoring/recognizing learning as progress toward credential (*accreditation, institutional*)
- 5. Require accountable continuous improvement, built on solid data infrastructure and appropriate guardrails, to address barriers to credit mobility -- and link efforts to the assistive application of cutting-edge credit evaluation technology to make the transfer landscape transparent to institutions, students, policymakers, and taxpayers. (*state, federal*)



For both policies and practices, attention to implementation during design is essential. There are no practices promising enough or policies with an evidence base strong enough to achieve their goals without careful attention to conditions and resources for implementation.