Reforming Transfer to Meet the Needs of "Post-Traditional" Transfer Students: Insights from Credit When It's Due

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In 2012, the Credit When It's Due (CWID) initiative was launched by the Funders Collaborative[1] to "encourage partnerships of community colleges and universities to significantly expand programs that award associate degrees to transfer students when the student completes the requirements for the associate degree while pursuing a bachelor's degree" (Lumina Foundation, 2012, n.p.). In 2012, 12 states (Arkansas, Colorado, Florida, Hawaii, Maryland, Michigan, Minnesota, Missouri, New York, North Carolina, Ohio, and Oregon) were awarded CWID grants, and in 2013, three additional states (Georgia, Tennessee, and Texas) signed on. In 2014, Arizona became the 16th state in this initiative that reaches to all regions of the country with policy and program changes intended to increase college degree attainment.

Research has been an important component of the CWID initiative from the start, emphasizing documenting and understanding what it takes to implement change that involves students of diverse backgrounds and interests and use data to inform capacity building to improve the transfer function. Because changes that are being made within states are relatively new, CWID provides the potential to see how policies and programs influence the state transfer function and influence student transition between and through higher education systems and institutions.

Research for this brief situates reverse credit transfer[2] in the larger context of transfer in the 15 CWID states that signed on to the initiative in 2012 and 2013. Our team has studied the intersection of the state transfer function and reverse credit transfer to better understand changes made to implement reverse credit transfer as well as to improve the overall transfer function. This includes researching the ways reverse credit transfer is being operationalized to improve transfer for diverse student populations that have been underserved by higher education historically. By providing examples of how transfer is changing in selected CWID states, we illustrate the ways transfer reform evolves through improved alignment, data sharing, and interinstitutional relationships.

> In the context of CWID, "reverse credit transfer" refers to policies and programs that enable transfer students to be awarded associate's degrees when they complete requirements for those degrees while pursuing the baccalaureate degree. Reverse credit transfer policies and programs are intended for students who transfer from a community college to a university without earning the associate's degree before transitioning to the university. College credits earned at the university are transferred back to the community college where a degree audit is conducted and students who have met all degree requirements are awarded an associate's degree.

Our research seeks to understand the ways in which the transfer process is changing for all students, but especially the group of students who follow complex, intermittent, and unpredictable attendance patterns. Our goal is to highlight changes in policy and practice that can enhance transfer for students who are less likely to follow a traditional college-going path. We turn now to defining what we mean by CWID and reverse credit transfer to provide a foundation for examining changes made by higher education systems and institutions to better serve all students who transfer in pursuit of a college degree.

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[1]The Funders Collaborative for CWID consists of: Lumina Foundation, The Kresge Foundation, the Bill & Melinda Gates Foundation, USA Funds, The Helios Education Foundation, and Greater Texas Foundation.

[2]We use the term "reverse credit transfer" to distinguish the transfer pattern of primary importance to CWID from terminology on "reverse transfer" coined by Townsend and Dever (1999) to describe the pattern of attendance whereby reverse transfer students make a physical transition from attending a 4-year institution to attending a 2-year institution (p. 5). Reverse credit transfer does not require the students to return to the 2-year institution, but rather only the transfer of their credits back to confer the associate's degree upon attainment of sufficient and appropriate credits.

Defining Reverse Credit Transfer

CWID is one of several multi-state initiatives in the United States that is focusing on transfer reform. Across the United States, state legislation on reverse credit transfer is spreading (Garcia, 2015) and with this growth comes the potential to broaden and scale reverse credit transfer reform. Although most state legislation does not mandate a specific model or particular approach, the presence of legislation has propelled some states to implement reverse credit transfer more expeditiously than in states without such statutes (Taylor & Bragg, 2015). Leaders of some CWID states express appreciation for the crafting of laws that have stimulated buy-in to statewide discussions about transfer while leaving the details of implementation to the practitioners who work in 2- and 4-year institutions. It is in this context that our CWID research team distilled a wide range of approaches to a general set of core dimensions that define what is meant by reverse credit transfer.

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According to Taylor and Bragg (2015), the five core dimensions of reverse credit transfer are: (a) student identification; (b) consent; (c) transcript exchange; (d) degree audit; and (e) degree conferral and advising. These five dimensions reflect core policies and processes pertaining to the implementation of reverse credit transfer programs.

The first dimension is **student identification** and refers to general eligibility criteria for reverse credit transfer, including criteria that designate students who are potentially eligible to participate. These criteria vary across states, systems, and institutions, but they tend to address many of the same aspects of eligibility, such as residency requirements and minimum number of credits that must be attained at the 2- and 4-year levels. The criteria also vary in restrictiveness versus expansiveness, with fewer students being potentially impacted when the reverse credit transfer criteria are restrictive. For example, policies with higher residency requirements or higher cumulative college credit cutoffs will eliminate more potentially eligible students than policies that set lower limits (Taylor & Bragg, 2015).

The second dimension is **consent**, and it refers to the ways in which consent is acquired from students to ensure that they have been given the opportunity to participate in reverse credit transfer. Because the Family Education Rights and Privacy Act (FERPA) requirements tend to require that students actively decide to participate, consent is an important dimension of reverse credit transfer (see discussion below). Methods that capture consent at the point of admission to the 2-year and/or 4-year institution levels, thereby integrating consent into existing systems and processes, are being implemented by some of the 15 CWID states. This approach builds consent into the students' interactions with colleges and universities at logical points in their college progression.

Transcript exchange is the third dimension, referring to the ways in which transcripts and/or course data are transmitted from the 4-year institution to the 2-year institution prior to a degree audit (mentioned below). Several technologies are available to support electronic transcript exchange, and 2- and 4-year institutions and systems vary in their investment in these technologies. Even with CWID funding, some institutions still choose to exchange paper transcripts by mail, but the movement toward using technology to send and receive electronic transcripts is growing.

The fourth dimension is the **degree audit**, which is the determination of whether students' combined courses at the 2- and 4-year institution meet requirements for an associate's degree. The degree audit process remains a manual process in many institutions and systems, but technologies to automate or simulate degree audits are increasingly available and important to managing the growing volume of degree audits that occur when CWID is implemented (Taylor & Bragg, 2015).

The fifth dimension is **student advising and degree conferral**. In reverse credit transfer, the 2-year institution confers the degree and notifies the 4-year institution that degree attainment has occurred. Students who do not complete requirements sufficient to attain an associate's degree may benefit from college advisors or other personnel communicating with them about the courses and other requirements needed to complete the associate's degree. In some cases, college advisors confer with students on courses that meet both the associate's degree and bachelor's degree requirements, and these communications are valuable to completion.

In the course of implementation of these five dimensions of reverse credit transfer, higher education systems and institutions change policies and processes pertaining to the eligibility criteria for transfer; the timing and processes pertaining to student consent to transcript review and degree conferral; the transmittal of student transcripts, records and data; the equivalency of courses as determined by credits and sometimes by competency; the specificity of articulation agreements between systems and institutions; and the creation or improvement of data-sharing systems. These changes have wider implications for the ways transfer happens beyond the reverse credit transfer context. Before we move to these reform developments, we first delve into the issue of student consent because of its importance to implementation of reverse credit transfer and other transfer reforms.

FERPA and Reverse Credit Transfer

Any discussion of policy implementation would be incomplete without recognizing the challenges that states are facing with the federal FERPA relative to implementing transfer reform. The primary issue with FERPA appears to be the requirement that institutions obtain consent from students before sharing their educational records (Blackwell, 2015). Under initiatives such as CWID where student record sharing is necessary, states and institutions may have to obtain student consent to send transcripts from one higher education institution to another, in the case of reverse credit transfer this means sending 4-year institution transcripts to 2-year institutions to authorize the conferral of associate's degrees, if and when students qualify for those degrees.

Despite consistent requests for clarity on FERPA since CWID began in 2012, the U.S. Department of Education has not released guidance for states on the implementation of reverse credit transfer in compliance with the federal law. The Privacy Technical Assistance Center (PTAC) is the center that acts as a "one-stop" resource for education stakeholders to learn about data privacy, confidentiality, and security practices related to student-level longitudinal data systems and other uses of student data. The PTAC has advised individual states affiliated with CWID on FERPA compliance relative to implementation of reverse credit transfer, but it has refrained from issuing an overarching directive specifically focused on this transfer issue. As a result, the legal counsel of states has stepped in to provide guidance on FERPA compliance, typically resulting in requiring individual student consent before the sharing of any student records relative to reverse credit transfer. Consequently, states have enacted processes to secure individual student consent that involves email, postal mail, phone calls, and other forms of communications that may be onerous and time consuming . As a result, the number of students who have thus far consented to participate in reverse credit transfer is relatively modest compared to the initial estimates proposed by CWID states (Soler, Bragg, & Taylor, 2016). To overcome this challenge, a number of CWID states have adopted student consent as part of ongoing admissions and enrollment processes, which results in greater success in terms of student participation (mentioned previously).

Table 1 provides a brief list of strategies that CWID states have employed that have been determined to be FERPA compliant by state and institutional legal counsel. These strategies are organized into two categories: (a) the Integrated Consent category that represents strategies embedding consent into existing processes so that the consent option reaches all transfer students, regardless of their eventual eligibility for reverse transfer; and (b) the Ad Hoc Consent category that represents strategies targeting only the subset of potentially eligible students when the timing is appropriate.

Table 1. CWID State Strategies to Secure Student Consent for FERPA Compliance

Integrated Consent	Ad Hoc Consent
• Consent is integrated into the transcript request form at the 2-year institution, so consent is acquired when students request that their transcripts are sent from the 2- to the 4-year institution. • Consent is integrated into the transfer student admission application at the 4-year institution, so consent is acquired at the point of admission to the 4-year institution for all transfer students.	• The 4-year institution requests consent via email, postcard, or postal mail when students meet reverse transfer eligibility requirements. • The 4-year institution leverages the learning management system to notify potentially eligible students and request consent for reverse transfer.

Evident in these strategies is the occurrence of policies specific to reverse credit transfer that can be applied more broadly to transfer reform, such as chang-

es to admission processes that embed student consent in the interinstitutional sharing of transcripts and records.

The Broader Transfer Reform Landscape

CWID represents one of the most recent initiatives to improve transfer; however, it does not operate in isolation from other transfer reforms, nor is it alone in terms of the conclusions it draws about the necessity for improved alignment in leadership, processes, and policies to address today's student transfer patterns. Many traditional transfer policies rely largely on seat-time and course-by-course comparisons to facilitate single, horizontal and terminal transfer patterns. Examples of these leading policy tools and theories behind them include:

- **Articulation.** Statewide or interinstitutional articulation agreements, including 2+2 and 3+1 agreements that strengthen partnerships between 2- and 4-year institutions. When formal articulation agreements are optimized, students are able to move between institutions without losing inordinate amounts of credit, and they are able to progress toward degrees in ways that are conducive to their attendance needs.
- **Course or learning equivalencies.** System and institutional learning outcomes assessment initiatives that use experts, academic groups, faculty committees, and other personnel to align curricula and course equivalencies and make transparent how students attain course credits toward their degrees.
- **Transfer blocks.** State- or system-wide efforts that establish general education transfer course or credit blocks toward specified transfer degrees (Education Commission of the States, 2014). Transfer blocks are intended to reduce the guesswork in course and credit transfer and enable students to progress from institution to institution to attain credits that qualify them for their degrees.
- **Pathway initiatives.** System or institutional efforts that organize and communicate pathway options to students through advising processes (Bailey, Jaggars, & Jenkins, 2015). Using terms such as "guided pathways" and also referred to as "career pathways" relative to career-technical education (CTE) and adult education (Clagett, 2015), these initiatives help students map out programs of study that lead efficiently (without credit loss) to credentials.

While these theories and tools work well to address notions of traditional transfer, in practice they often are not flexible enough to address the patterns of post-traditional[3] transfer students. Many newer initiatives on the horizon, including large-scale reforms such as CWID, Project Win Win, Quality Collaboratives, and others surface the need and the possibility for more fully transformed, fluid systems that are not limited to supporting one-time, vertical transfer. These reforms recognize the importance of removing nonessential barriers, enhancing interinstitutional communication and cooperation, and establishing functional mechanisms that serve post-traditional transfer students as the rule rather than the exception.

CWID, for example, has worked from a foundation of theories and policy tools to advance systemic flexibility to address post-traditional patterns. Reforming communication, cooperation, credit mobility, and even advancing course equivalencies through competency-based approaches are part of CWID. Some other initiatives addressing similar themes are illustrated below:

- **Project Win Win** is led by the Institute for Higher Education Policy (IHEP). This initiative focuses on developing policies and processes to award credentials to students who have already completed the credits necessary to earn a credential without receiving it, or to reenroll students who are within 9-12 credits of conferral of a credential. This initiative identifies the incidence with which students secure sufficient (or nearly enough) credits to be conferred a credential but fail to do so. Project Win Win has surfaced the need for improved data systems with robust tracking that accommodate students' complex attendance patterns, enhanced and customized transfer processes for disciplines such as STEM and other growing programs of study; and other solutions that reduce the barriers that students experience to completion, including graduation fees and confusing paperwork (Adelman, 2013).
- The **Degree Qualifications Profile (DQP)** describes a set of learning-focused reference points for what students should know and be able to do upon completion of associate's, bachelor's and master's degrees. The Lumina-funded DQP

[3] The term is used in the literature without clear authorship but we want to give attribution to sources that have found it useful, just as we have. These organizations include Excelencia in Education (see Santiago, 2013), NASPA (see Smith, 2013), among others who have a deep-seated commitment to supporting and understanding diverse learners. The term denotes that the majority of students enrolled today in postsecondary education do not easily fit a "traditional" student identity in terms of attendance patterns, racial or ethnic identity, age, or even the types of college they attend. As such, the term "nontraditional" is outdated.

framework has been tested and implemented by numerous higher education institutions and systems. A project lead by the Association of American Colleges & Universities titled, *Quality Collaboratives,* examined structures and processes that contribute to transfer student success. This project used the lens of student proficiencies and course outcomes to assess the way in which transfer is functioning. Undergirding this work is an interest in advancing equity in higher education and in the transfer process by framing processes around achieving equitable outcomes in terms of producing equitable student learning that can support student success in transfer (Humphreys, Ramaley, & McCambly, 2015). This work posits that barriers to transfer as well as to communicating the value of credentials to employers could be reduced if student learning could be made more visible and portable.

- **Transfer Tracking Reforms.** Projects funded by the Bill & Melinda Gates foundation, led by a collaboration of the Aspen Institute, the Public Agenda, and the Community College Research Center (CCRC) posit the need for systemic transformation of transfer. Jenkins and Fink (2016) used state-level data to highlight the importance of reforming transfer, recognizing variation in state transfer functions according to a set of metrics and data from multiple sources, including the National Center for Education Statistics and the National Student Clearinghouse. Relative to post-traditional transfer students, Jenkins and Fink found lower rates of transfer and baccalaureate attainment for lower income transfer students. More recently, Wyner, Deane, Jenkins and Fink (2016) produced a "transfer playbook" to apply lessons from their research to help 2- and 4-year colleges improve transfer policy and practice at the institutional level. This publication reports on the transfer-related strategies that 2- and 4-year institutions with especially high transfer student success rates have implemented, pointing to the need to prioritize transfer, create clear pathways, and reinforce advising processes.
- **Web-based degree audit tools.** Although not an initiative per se, technologies designed for current and former students to see how their accumulated credits apply toward credentials or transfer are proving to be dynamic transfer tools. For many states, these tools are low-hanging fruit to improve service to post-traditional transfer students looking to explore their options. Often, these technologies require the sharing of student-level data in real time, which expedites their use for the purposes of auditing transcripts and student records and conferring credentials.

Understanding how CWID and this complimentary set of transfer reform initiatives and strategies is attempting to address the needs of post-traditional students is the focus of this next section.

Meeting Post-Traditional Transfer Students' Needs

As the previous section illustrates, CWID is one of a number of initiatives that is bringing transfer credit mobility into the national college completion conversation. CWID has encouraged participating states to surface and confront deeply rooted schemas and assumptions about college attendance patterns that may impede student completion. Creating a system in which reverse credit transfer can operate successfully and sustainably requires re-envisioning entrenched transfer and articulation policies and processes and reframing what transfer policies need to look like to support student success. As a result of conducting self-studies, new policies and processes have emerged in CWID states to strengthen their capacity to support students who swirl by moving horizontally and longitudinally, as well as by reversing course in pursuit of their credentials.

Understanding how college student attendance patterns are changing is important because, without understanding these patterns, it is possible higher education will be less rather than more successful with college completion in the future. Looking at data from the last 20 years, the National Student Clearinghouse estimates that more than 31 million higher education students have accumulated some college credits but no college credential in a certificate or degree. Perhaps as many as 1.2 million of these students left college after having completed two years of full-time attendance (Shapiro, Dundar, Harrell, Wild, & Ziskin, 2014), suggesting a high likelihood of transfer if these students return to college and also potentially high eligibility to benefit from reverse credit transfer. Students who have attended college but not attained credentials are also more likely to be members of underserved student populations than traditional college students. Their patterns of enrollment reflect post-traditional transfer student attendance in that they move in and out of college and participate in other ways that appear counter to (or at least neutral to) logical progression.

A consequence of higher education systems that leave students' transfer experiences unfulfilled is that they do not cultivate and promote talent for the economic and social endeavors that the nation needs to remain productive. For students who are the most underserved by higher education, the inadequacies of

the transfer function reflect inequities in college participation that extend to employment and wellbeing. Diverse learners who do not return to college to obtain sufficient credits to secure a degree are left without a marker for the competencies they developed through their college experience (Bragg, Cullen, Bennett, & Ruud, 2011). Employers are disadvantaged as well as they struggle to identify and secure qualified employees who reflect the diversity of their constituencies and who are needed to grow their enterprises.

The pressure of unmet transfer student needs within higher education continues to build, although the literature has recognized "transfer swirl" for many years (de los Santos & Wright, 1990). National data from over a decade ago show half of all bachelor's degree recipients attend more than one postsecondary institution (McCormick, 2003) and yet, the transfer function has remained predominantly focused on the traditional, upward progression of student transfer from 2-year institutions, with associate's degree attainment, to 4-year baccalaureate-granting institution. Higher education systems and institutions are beginning to recognize that the loose and uneven patchwork of transfer policies developed over the past several decades does not meet the needs of many of these students. As a consequence, college credits fall through the cracks and students are unable to secure college degrees, even when they have accumulated sufficient credits and learning to deserve the credentials. Transfer infrastructures intended to legitimize a college education leave many transfer students unsure of their options to navigate systems and institutions (Humphreys, McCambly, & Ramaley, 2015), and this concern manifests disproportionately in student populations historically underserved by higher education. Many students with limited financial resources to attend college or who are the first in their family to enroll in college do not understand the complexities of transfer as systems and institutions may not make the transfer process clear and accessible to them. For these students, the group we call post-traditional transfer students, the negative pull of transfer may be enough to make completion of any college credential a near impossibility.

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Reforms that attempt to recognize that the transfer function should be malleable and responsive rather than rigid and bureaucratic are emerging from projects such as CWID. In the outcomes-focused environment in which CWID is operating, higher education systems and institutions need to understand how students are progressing, including the post-traditional transfer students for whom the swirling attendance pattern is the norm rather than the exception. By better accounting for students' mobility and progression toward credentials, CWID and other reforms are attempting to overcome the inflexible infrastructure that dominates the transfer function.

Systemic Change in the Transfer Function

Seemingly straightforward, the conferral of associate's degrees to transfer students who have matriculated in a 4-year institution bachelor's degree program of study, such as occurs through CWID, is a surprisingly complex idea. Some CWID states have found that implementation of this second-order change, referring to the level of change that is disruptive to the existing order and long-lasting (Marzano, Waters, & McNulty, 2005), has required engaging in self-study that has led to a redefinition of the transfer function, including investing in system-wide and interinstitutional relationship and partnership building. Leadership for the purpose of changing policy is important to transforming systems and institutions in ways that meet post-traditional transfer students' needs. Our research of CWID has revealed promising examples of leadership and policy change acting together to provide the source of capital and impetus for improving transfer. In the course of a transfer reform such as CWID, leadership for policy change is demonstrated in re-defining the realm of the possible with respect to strengthening transfer policies to better serve students' needs.

Within the CWID states, leaders from all ranks of government and higher education, including policy makers, higher education leaders, faculty, and others have held meetings to share what they are learning about transfer reform, including implementation strategies that can be scaled statewide. In this regard, the CWID initiative has also built a network of states that are committed to learning from one another about how to implement reverse credit transfer policies, as well as how to situate reverse credit transfer in a larger transfer reform agenda. The integration of research from the start of CWID to the present time has reinforced the importance of states using evidence to make macro- and micro-level decisions concerning transfer reform.

Transfer Reform as Context for Reverse Credit Transfer

To understand transfer reform, including reverse credit transfer, it is helpful to understand the larger state policy context for the transfer function. To delve into this phenomenon, we analyzed our data on CWID state policy implementation to describe the ways disparate infrastructure, governance, and administrative arrangements, ranging from a single public higher education system to no centralized structure for governing public institutions, are represented in the changing state transfer landscape. These data on state policy context and policy change were collected and analyzed as individual state cases over the course of the four years of the project. Created using multiple interviews with state policy and CWID project leaders, observations of multi-state convenings and small-group discussions, as well as documentation of historical and evolving state policy, legislation, college completion initiatives, and policy implementation, state cases were organized around common components, including transfer policy drivers, barriers, successful transfer policy tools, and the context for advancing transfer reform in each state in relation to larger higher education change initiatives. An emergent thematic analysis was then conducted to identify dimensions and aspects of reform concerning the alignment of larger transfer policy and CWID's goals and implementation efforts.

Given different state policy contexts, it is not surprising that transfer reform policies evolve in different ways, resulting in distinctive priorities and strategies. The following discussion presents four CWID states where transfer policies have undergone review and reform for some time, with the more recent reverse credit transfer implementation having been informed and shaped by the larger and longer-term transfer reform efforts.

Colorado. Colorado's guaranteed transfer pathways, referred to as gtPathways, designate that the general education core is comprised of 31 credits that are distributed among four disciplinary areas. According to the Colorado Department of Higher education website, there are more than 1000 courses that apply toward the gtPathways that are transferrable among public colleges and universities in Colorado. Developed in concert with university and community college faculty, these pathways seek to foster transparent expectations for institutions and students. As of November 2015, 32 articulation agreements had been signed, and as of Spring 2016, Colorado was working to expand Prior Learning Assessment initiatives to allow portfolio credit, as well as assessments like Advanced Placement (AP) and the College Level Examination Program (CLEP) to transfer the same way to any public institution.

With respect to CWID, in April 2012, Colorado's governor signed the state's Senate Bill 12-045, which declared that community colleges and universities should work in collaboration with the Colorado Commission on Higher Education (CDHE) to develop a process to confer associate's degrees earned by students on the path to a baccalaureate. The legislation stipulates that if a student completes the residency requirement at a community college (15 college credit hours from one community college), transfers to a university, and accumulates 70 credit hours (including transferred credits) at the university level, that student must be notified that they may be eligible to receive an associate's degree from the primary, sending community college. As of May 2015, all public universities and colleges in Colorado (28) and one private university are participating in Degree Within Reach, the reverse credit transfer program in Colorado. To implement this program, the state has created a course equivalency infrastructure using Banner and an electronic transcript exchange using Parchment. The Degree Within Reach website (see: https://degree withinreach.org/) informs potential students and other stakeholders about the program, explains how it works to students, and offers information for advisors and registrars at 2- and 4-year colleges and universities.

Hawaii. Building on an active transfer and articulation policy landscape, the University of Hawaii (UH) Board of Regents implemented Executive Policy E.5209 in 1989 and revised this policy in 1994, 1998, and most recently 2006. Operating as a single system of higher education for the state, this policy has provided the foundation for transfer from community colleges to universities for several decades. However, in recent years, the UH system has worked to refine the pathway concept for the most common majors in an effort to create pathways that allow community college students to complete their programs of study in a 2+2 fashion. To achieve this goal, the UH system eliminated admissions application fees, providing an incentive for students to consent to reverse credit transfer and reducing cost of the application for all UH students. Though this change is modest in scale, it may reduce a hurdle to participation by low-income students. Also, the UH system has developed a global articulation policy that allows for acceptance of general education in whole or as part of the general education core, thereby expanding beyond course-to-course articulation that was used in the past. Credits awarded according to learning out-

comes-based course equivalencies are also being implemented and expanded, enhancing the transferability of credits and allowing more students to receive an associate's degree via reverse credit transfer.

Hawaii has prioritized improvements to transfer policies, including who is eligible and how and when credit is awarded. These investments not only facilitate reverse credit transfer, but also create a forward-looking technology infrastructure that allows the system, institutions, programs, and even students to assess their academic records and track credit accumulation along academic pathways toward credentials. The cloud-based, integrated, online advising and degree attainment support system called STAR Academic Pathway has been enhanced to accommodate reverse transfer system-wide, and the university system's efforts to create global area competencies and equivalencies. These enhancements are credited with the success of the system, which can now award significantly more associate's degrees through reverse credit transfer than was possible in the past.

Minnesota. The legislative bodies in Minnesota have been a primary driver for formal policy transfer change. In 2010, Minnesota lawmakers developed a "Smart Transfer Plan," that laid out four requirements of public institutions related to transfer: 1) course outlines for all courses that institutions must post on their website; 2) equivalencies and transferability of courses marketed to students before their courses start; 3) students' right to appeal course equivalency decisions; and 4) an appeals process. The Minnesota Transfer Curriculum requires that all public institutions recognize other institutions' general education courses by identifying how they address 10 competencies. Moreover, all public institutions must recognize the "transfer package." Minnesota also has negotiated a bi-state articulation agreement with North Dakota and this agreement recognizes that students traverse the two states and that formal policy needs to address adequately credit transfer that leads to credential attainment.

Minnesota has implemented its reverse credit transfer initiative alongside and in conjunction with these various transfer reforms. A total of 7 universities and 24 community and technical colleges participate in CWID through the Minnesota State Colleges and Universities (MnSCU) system, and the University of Minnesota participates through a separate Memorandum of Understanding (MOU) with community colleges throughout the state. Most MnSCU universities have the authority to confer the associate's degree, so community and technical colleges as well as universities may seek student consent and confer reverse transfer associate's degrees. MnSCU's Smart Transfer Plan creates a student-friendly transfer environment within the state. A steering committee and subcommittee has focused in improving the Degree Audit and Reporting System (DARS) for the purpose of reverse credit transfer. Also, policies pertaining to residency and graduation have been modified to support reverse credit transfer, and progress has been made in coordinating transfer between MnSCU and the University of Minnesota system, including the transfer of the Minnesota Transfer Curriculum that represents the 40-credit general core.

North Carolina. North Carolina's Comprehensive Articulation Agreement (CAA) was adopted in response to a legislative mandate in 1995 (HB 739 and SB 1161) that created transfer routes for North Carolina's community college students and the University of North Carolina (UNC) system. Under the CAA, students who complete an Associate's of Arts (AA) or Associate's of Science (AS) degree, as well as those who complete a recognized 44 credit-hour general education block, can fully transfer this block from a community college to a 4-year institution. Additionally, the CAA guarantees admission of North Carolina's community college graduates into one of the UNC institutions, with some stipulations. Current initiatives allow all students who transfer with an AA or AS to receive junior status, including those with nursing and engineering Associate's of Applied Science degrees.

This longer history with transfer laid the groundwork for reverse credit transfer, making the initiative part of a legacy of transfer improvements in the state. Some North Carolina leaders declared reverse credit transfer the state's "highest priority" in transfer and articulation, even within an already expansive transfer policy agenda. A joint presentation of the North Carolina Community College System (NCCCS) and the UNC System articulated the need for improved collaboration in transfer to reach the state's college completion and credential goals, and in summer 2012, just prior to the start of CWID funding, these entities signed a joint grant proposal and Memorandum of Understanding to support CWID's goals. Joint policy formation addresses the automation of degree audits and mapping processes relative to reverse credit transfer and degree completion. The Student Data Mart (SDM) system, which started prior to CWID, provides the primary mechanism for transcript-level information to determine student eligibility. Also, significant efforts have been made to improve course articulation and equivalencies that allow community colleges to articulate more university courses toward associate's degree requirements.

Extending Lessons from CWID to Transfer Reform

From the start, many states identified CWID as a test bed for transfer reform. For example, recognizing that advancements in technology would allow systems and institutions to more easily and efficiently access student records, perform student record audits, and share student information was viewed as a worthy and potentially consequential benefit. Contrary to claims that CWID is mainly about gaming the system for the sake of boosting college completion rates (Strahler, 2015), state leaders involved in the CWID initiative report a range of intentional and unexpected spillover benefits. With respect to planning, states used CWID funds to update technologies that were too outdated to track student attendance, and some were surprised to learn of the misalignment in curriculum that they thought was addressed by existing transfer agreements. In the context of larger and more ambitious transfer reforms, CWID has enlightened a wider array of policy and process concerns that impact all students, especially students who demonstrate post-traditional attendance patterns. Additional examples of transfer policies that are being improved through CWID in the three states of Michigan, Missouri, and Tennessee are described below.

Michigan. In 2012, Michigan House Bill 5372 (H-1) CR-1 required that community colleges collaborate with Michigan's public universities to establish reverse credit transfer agreements with at least three community colleges by January 2013 in order for institutions to receive performance funding. As of April 2015, nearly 160 agreements had been developed among Michigan's 28 community colleges and 15 4-year public institutions. Some of the agreements reflect consortia arrangements and others are single institution-focused, but all are locally created. Each subsequent state appropriations bill, including FY2016, has included this requirement in the boilerplate reports. Enhancements to coordination of transfer have occurred statewide, and a robust data collection activity has occurred with the state's Center for Educational Performance and Information. To this end, data elements have been added to the emerging state longitudinal data system that will support the tracking of reverse transfer students. These improvements may have spillover effects

Missouri. The state of Missouri began CWID with a pilot held by six high-volume transfer institutions in Fall 2013 and Spring 2014, and CWID was subsequently spread to all public institutions in Fall 2014 in accordance with House Bill 1042, which mandated all public institutions must participate in reverse transfer by 2014. This legislation meant Missouri's reverse credit transfer initiative is one of the most comprehensive of any state in the nation as it encompasses all public institutions and any private institutions that volunteer to participate. A central steering committee and four workgroups were convened to develop the state's reverse transfer policy, which was vetted by all chief academic officers from participating institutions and subsequently approved by the Coordinating Board for Higher Education (CBHE). The policy establishes common guidelines related to residency requirements, student eligibility requirements, participating institutions, the basic reverse transfer process, institutional and student responsibilities, and reporting and accountability. Beyond providing a common policy framework for implementation, the policy circumvents (broad constituency to make changes from bottom up) the need for public institutions to enter into unique MOUs for the purpose of reverse credit transfer. In addition to the CBHE-approved policy, a comprehensive reverse transfer implementation handbook for reverse transfer was developed, and detailed implementation protocols and processes have been attributed with improving transfer processes beyond the CWID initiative.

Tennessee. Through CWID, Tennessee awarded a contract to *Academy One*® to build a system that allows 4-year institutions to upload eligible students' records, obtain consent, combine histories, audit degrees, and send results of the simulated degree audits to community colleges to assess and determine degree candidacy. The system supports pathways, courses, and simulated degree audits aligned with CWID but more broadly for all students who are transferring. Building from the technology that *Academy One*® developed as part of their CWID effort, an initiative called Tennessee Reconnect focuses on adult and veteran students and enables near-completers who stop out to reconnect with institutions, assess progress toward their desired degree pathways, and return to school to complete the degree. Another major factor shaping the state's policy landscape is the Tennessee Promise (TN Promise), the state's free community college initiative. Although the impact of this initiative is still emerging, there is an awareness of the need to research the state's portfolio of reforms on transfer pathways, including studying the transferability of CTE and other technology-related college courses to universities in order to maximize the impact of the TN Promise. Finally, transfer reform in Tennessee is noteworthy because of the breadth and depth of involvement of the higher education system. The *Tennessee Transfer Pathway* is aimed at facilitating students' timely pro-

gression towards a bachelor's degree, with each pathway identifying 60 hours of course instruction fully transferable from community colleges to public universities. A total of 49 pathways across 29 disciplines have been developed thus far, but more are planned. Thus far, CWID has not impacted these pathways as much as anticipated but with the Tennessee reverse credit initiative being one of the newest in the state, it is possible efforts need to grow and mature to assess impact.

Implications for Future Policy and Research

Four years after CWID's launch, transformation is still in progress, with each state having its own set of strengths and challenges. However, the creation of capacity among state leaders who are providing new responses to systems and institutional alignment for greater transfer outcomes is informative of the potential for larger and more expansive transfer reform. Our cases from the CWID states reveal the kinds of second-order changes necessary to serving students whose circumstances require flexible and supported transfer options. Indeed, today's diverse students require policies that create intentional relationships for the purposes of sharing data, assessing course and competency equivalencies, and communicating with clarity the intentional pathways that facilitate transfer and meet post-traditional transfer students' needs.

These policies and processes may improve transfer and result in greater economic and social advancement for student groups that have heretofore experienced obstacles to their progression. CWID's critical mission—to award credit for students' collegiate accomplishments, even when those accomplishments crossed institutions and expectations—continues to unfold and grow, and the benefits of these new policies and processes show promise for broader- and longer-term impact on the transfer function. Capturing and using data to illustrate and inform these developments remains an important goal of our research team in partnership with the CWID states and Funders Collaborative.

> *"The goal should not be to teach transfer students to work in an outdated system but to transform the system so that it more readily serves the transfer students of today and tomorrow."*

To expedite additional transfer reform, we also offer the following recommendations.

- Higher education systems and institutions should be mindful that reverse credit transfer should be part of a larger transfer reform agenda. It is important not to think of reverse credit transfer as separate and distinct from the transfer function or to silo reverse credit transfer from other transfer reforms. A systemic approach to transfer reform should prioritize key values like transparency, recognition of a diversity of approaches to student learning and credit attainment, and adaptable interinstitutional relationships to better serve transfer student attendance patterns.
- Higher education systems and institutions should identify and address the needs of post-traditional transfer students. To implement meaningful change, it is not sufficient to recognize that transfer students are increasingly diverse and therefore require more advising, although good advising is certainly a positive step, but to dig into understanding post-traditional transfer students' participation patterns. The goal should not be to teach transfer students to work in an outdated system but to transform the system so that it more readily serves the transfer students of today and tomorrow.
- Transformative changes needed to truly benefit post-traditional transfer students can be identified by listening to the students and understanding their experiences through first-hand accounts. Quantifying matriculation patterns by student sub-groups is important, but it is insufficient to understand and act upon without qualitative data that reflects the nuanced personal experiences of the students.
- Extending from the last point, future research on transfer should address change relative to the past and present representation of the state transfer function as a bureaucracy. These transfer systems tend to teach students that navigating college is about following rules rather than about learning that contributes to college and career attainment. When the most common transfer tools are labor-intensive "patches" to bridge from one program at one institution to the one program at another, students are unable to interpret and effectively navigate the higher education system.
- Finally, there is a great deal that states, higher education systems, and institutions can learn from one another about the implementation of transfer reform, including reverse credit transfer, if we consider the ways to facilitate "policy borrowing" and "policy learning" (see, for example, Evans, 2009). The CWID initiative has been thoughtful

about creating a network of states that are learning from one another, including considering the contributions of experts and researchers as well as convenings dedicated to learning and shared policy agendas. Future transfer reform initiatives may benefit from intentionally building similar networks that facilitate interstate policy learning and borrowing to accelerate and enrich policy reform and alignment.

References

Adelman, C. (2013). *Searching for our lost associate's degrees: Project Win-Win at the finish line*. Washington, D.C.: Institute for Higher Education Policy. Retrieved from http://www.ihep.org/sites/default/files/uploads/docs/pubs/pww_at_the_finish_line-long_final_october_2013.pdf

Bailey, T., Jaggars, S. S., & Jenkins, D. (2015). *What we know about guided pathways.* New York, NY: Columbia University, Teachers College, Community College Research Center. Retrieved from: http://ccrc.tc.columbia.edu/media/k2/attachments/What-We-Know-Guided-Pathways.pdf

Bragg, D. D., Cullen, D. P., Bennett, S., & Ruud, C. M. (2011). *All or nothing? Mid-point credentials for college students who stop short of credential requirements*. Champaign, IL: Office of Community College Research and Leadership, University of Illinois.

Clagett, M. G. (2015, December). *A guide for the development of aligned career pathways systems*. Boston, MA: Jobs for the Future. Retrieved from: https://s3.amazonaws.com/PCRN/docs/A-Guide-for-the-Development-of-Aligned-Career-Pathways-Systems.pdf

de los Santos, A. G., & Wright, I. (1989). Community college and university student transfers. *Educational Record, 79* (3/4), 82–84.

Education Commission of the States. (2014, May). *Transfer and articulation - All state profiles.* Retrieved from: http://ecs.force.com/mbdata/mbprofallRT?Rep=TA14A

Evans, M. (2009). Policy transfer in critical perspective. *Policy Studies, 30*(3), 243-268.

Humphreys, D., McCambly, H., & Ramaley, J. (2015). *The quality of a college degree: Toward new frameworks, evidence, and policies*. Washington, D.C.: Association of American Colleges and Universities.

Jenkins, D., & Fink, J. (2016). *Tracking transfer: New measures of institutional and state effectiveness in helping community college students attain bachelor's degrees*. New York: Community College Research Center and the Aspen Institute. Retrieved from http://www.aspeninstitute.org/publications/tackling-transfer

Lumina Foundation. (2012, October 10). *Foundations help 12 state partnerships expand associate degree completion for students transferring from community colleges to universities* [Press release]. Retrieved from http://www.luminafoundation.org/newsroom/news_ releases/2012-10-10.html

Marzano, R. J., Waters, T., & McNulty, B. A. (2005). *School leadership that works: From research to practice*. Alexandria, VA: Association for Supervision and Curriculum Development.

McCormick, A. C. (2003). Swirling and double-dipping: New patterns of student attendance and their implications for higher education. *New Directions for Higher Education*, *2003*(121), 13–24.

Shapiro, D., Dundar, A., Harrell, A., Wild, J., & Ziskin, M. (2014). *Some college, no degree: A national view of students with some college enrollment, but no completion*. Herndon, VA: National Student Clearinghouse Research Center. Retrieved from http://nscresearchcenter.org/signaturereport7/

Santiago, D. (2013). *Using a Latino lens to reimagine aid design and delivery*. Washington, D.C.: Excelencia in Education! Retrieved from http://www.edexcelencia.org/sites/default/files/latinolens_excelenciawhitepaperfeb2013.pdf

Smith, E. J. (2013, October 31). *Post-traditional learning amid a post-traditional environment*. Retrieved from: https://www.naspa.org/rpi/posts/NASPA-posttraditional

Strahler, S. R. (2015, October 17). How city colleges inflates graduation rates. *Crain's Chicago Business*. Retrieved from http://www.chicagobusiness.com/article/20151017/ISSUE01/310179995/how-city-colleges-inflates-graduation-rates

Taylor, J. L., & Bragg, D. D. (2015, January). *Optimizing reverse transfer policies and processes: Lessons from twelve CWID states*. Champaign, IL: Office of Community College Research and Leadership, University of Illinois at Urbana-Champaign.

Townsend, B. K., & Dever, J. T. (1999). What do we know about reverse transfer students? *New Directions for Community Colleges,* No. 109. San Francisco, CA: Jossey-Bass.

Wyner, J., Deane, K., Jenkins, D., & Fink, J. (2016). *The transfer playbook: Essential practices for two- and four-year colleges.* Washington, DC: The Aspen Institute. Retrieved from: http://ccrc.tc.columbia.edu/media/k2/attachments/transfer-playbook-essential-practices.pdf

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