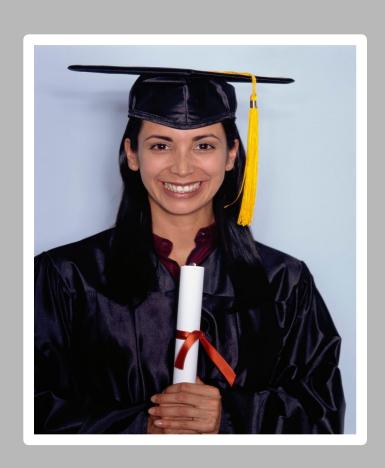


HOUSE BILL 2525 (2015): Final Report June 2016



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EXECUTIVE SUMMARY

House Bill 2525 (2015) required the Higher Education Coordinating Commission to conduct an analysis of the "processes" required to make sure that transfer students are receiving credit for courses that are "sufficiently similar" to courses at their destination university, and formulate a new research plan to focus on the needs of transfer students statewide.

In response to that charge, HECC staff convened a workgroup of 24 statewide community college and university leaders to investigate the problems, processes, and systemic approaches to transfer student success and retention across the state's public institutions. That workgroup helped define the research questions that are the subject of this report, and that will continue to shape the state's approach to transfer student success as a systemic efficiency and equity concern.

Upon reviewing credit accumulation patterns statewide and at specific institutions, the researchers concluded that all students are accumulating "excess" credit (beyond 180) for the bachelor's degree, and transfer students in particular are accumulating the most excess credits. From the numbers alone, it is impossible to tell whether credit accumulation is due to deliberate course taking patterns by students, or due to inefficient pathways and information gaps. Qualitative research on transfer student experiences both in Oregon and elsewhere suggests that the latter situation is much more common and the primary driver of transfer student excess credit accumulation. When we recall that more credits mean more money and more student debt, and longer times to degree, these findings indicate a statewide problem in need of coordinated statewide action.

The report concludes with "Principles for Transfer Student Success & Coordination" and "Recommendations" for further action and study. The Principles section provides the basis for the Recommendations; both of these center on the necessity for students, faculty, and advisors to have access to current and relevant information to make informed choices about course taking and selection. Students report that they are trying to plan their transition from community college to university based on insufficient or outdated information; even the statewide transfer degrees (AAOT, ASOT-Business, and ASOT-Computer Science) appear inefficiently aligned to their intended universities' degree target programs. The report therefore recommends state support to convene academic leaders, faculty, advisors, and others to realign the statewide degrees and to thoughtfully implement "major related pathways" between the two sectors. Development and implementation of a statewide transfer student information platform, if funded, should be the subject of study for a technical workgroup. Future research on transfer student experiences and outcomes should become a regular subject of HECC reporting, and finally, transfer student success coordination should be the subject of at least one FTE at the HECC agency in future.

INTRODUCTION: HOUSE BILL 2525 AND TRANSFER POLICY HISTORY

Section two of House Bill 2525 (HB 2525) (2015)¹ focuses on information resources currently available to transfer students, the means to increase and clarify transfer equivalencies, and the data needed to analyze specific questions related to transfer. The Higher Education Coordinating Commission (HECC) is directed to convene a workgroup to

- Assess the types of information available to students for degree requirements, and identify the number of credits and types of courses that fulfill baccalaureate degree requirements;
- Determine the feasibility and cost to implement a transfer credit evaluation system that has data from all community colleges and public universities in the state and that may be used by students to determine which credits will transfer among the community colleges and universities in the state; and
- Determine how to implement best practices for providing students with the information indicated above.

In addition, HECC is directed to develop and initiate a research plan to analyze widespread anecdotal reports of misalignment between community college transfer degree programs and baccalaureate degree programs at the public universities, with an eye toward "credit loss" or "leakage" when students vertically transfer between postsecondary education sectors. In this regard, HB 2525 focuses on

- Which credits for an associate transfer degree are not applicable toward a baccalaureate degree;
- Whether credits for an associate transfer degree that are not applicable toward a baccalaureate degree are considered to be elective credits; and
- Why some credits for an associate transfer degree are not applicable toward a baccalaureate degree.

A report is to be submitted to the legislature on July 1, 2016 summarizing the work group results and the research plan. The report which follows reflects the efforts of the HB 2525 work group and HECC agency staff to respond to the charge of HB 2525 and to understand the complex and varied landscape of Oregon's community college to university transfer system.

The report provides background on statute and context related to transfer in Oregon, and looks at current national research on transfer student barriers and historical attempts in Oregon to create more seamless vertical transfer pathway. It provides legislative and policy history related to transfer, and outlines recent and current approaches to transfer student credit, including analysis and efforts undertaken by local institutions. Reviewing recent information on transfer student credit accumulation patterns at individual institutions and statewide, the report discusses the mismatch between current statewide transfer degrees, realities of limitations regarding time to degree and federal financial aid eligibility, and the needs of today's students. Qualitative research with students and transfer professionals regarding barriers to transfer is discussed. The report concludes by identifying some key principles for transfer student success and statewide coordination, questions for further study, and recommended actions to create a better academic transfer information ecosystem that serves and supports students. Overall, it highlights the ongoing need for seamless, well

¹ https://olis.leg.state.or.us/liz/2015R1/Downloads/MeasureDocument/HB2525/Enrolled

integrated, and clearly defined student transfer degree pathways. Legislators and interested stakeholders will recognize the challenges, costs, and benefits that come with realizing this goal.

CURRENT LAW RELATING TO TRANSFER AND ARTICULATION

Current law outlining the scope and responsibility of the state for supporting transfer student success is contained in ORS 341.430.2 The statute instructs HECC to develop standards (the "Transfer Student Bill of Rights and Responsibilities") related to the public university admission standards for students who have earned an associate transfer degree, multiple processes related to the applicability of credits from community college to universities, and any other issues relating to courses of study at community colleges and the ability of a student to transfer credits, to be admitted to a public university, or to earn a degree at a community college or a public university. HB 2525 adds to the existing statute by requiring additional standards related to the ability of students to apply credits earned through courses of study at community colleges to baccalaureate degrees awarded by public universities: namely, "Processes to align requirements for community college courses and public university courses to ensure that credits earned for completion of sufficiently similar courses are fully transferable between all community colleges and public universities," and "identifying majors in baccalaureate degree programs that require more than two years to complete after a student has earned an associate transfer degree." The existing Transfer Student Bill of Rights and Responsibilities also includes processes

- To minimize the number of credits that students who have completed a transfer program or earned an associate transfer degree would need to complete prior to receiving various types of baccalaureate degrees at public universities;
- To evaluate and make recommendations for the development of associate transfer degrees in specific areas of study, including engineering; and
- By which a community college would award an associate degree to a student upon completion of necessary credits, regardless of whether the student applied to receive the degree or whether the student earned the credits for the degree at a community college or a public university (also known as "auto-awarding" and "reverse transfer").

There is no reference in statute to statewide transfer degrees such as the Associate of Arts — Oregon Transfer (AAOT) or Associate of Science — Oregon Transfer (ASOT) in Business or in Computer Science, or the Oregon Transfer Module (OTM). The degrees are minimally described in Oregon Administrative Rules (OARs) 589-006-0050 (5) and (7);³ the transfer degrees and the OTM are primarily detailed through agency policy identified in the CCWD Handbook and implemented at the local level by postsecondary institutions.⁴

BACKGROUND ON TRANSFER ISSUES AND CONCERNS

One of the typical reasons some previously-earned postsecondary credits may not be accepted in transfer to a new institution is simply lack of applicability or equivalence: for example, if the student's prior credits do not meet university, degree type, general education or program-specific (major/minor) requirements. In this

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² https://www.oregonlegislature.gov/bills_laws/ors/ors341.html

³ http://arcweb.sos.state.or.us/pages/rules/oars 500/oar 589/589 006.html

⁴ http://handbook.ccwdwebforms.net/handbook/

common situation, some credits earned may not align to institutional requirements; if accepted, they may be relegated to "elective credit" status. Although this credit may "count" toward overall credit completion requirements for the associate degree or baccalaureate degree sought by the student, it may become a liability for the student who is nearing degree completion but has accumulated "excess credit" as determined in accordance with federal financial aid policy. This happens not only with credit transferred: students who persist in postsecondary education but have not identified a clear degree goal or worked closely with an advisor to develop a robust course taking plan, as well as those who switch their major or intended program of study, may also incur credits which are not (or are no longer) relevant for the degree ultimately pursued.

Credits earned to fulfill requirements for statewide degrees such as the AAOT – a degree intentionally designed to fulfill lower division general education requirements at the university and to be broadly transferable and applicable to a number of different major fields of study – may include credits for courses which are not necessary for a particular university's general education, program type, or institutional requirements: for example, the three-credit Health/Wellness/Fitness requirement of the AAOT appears to serve general requirements at only a small number of universities; the number of credits required in writing exceeds general education requirements at most universities; the number of discipline courses, likewise, may exceed university requirements and/or may not, by themselves, provide enough nuance for students to know which of those courses would fit best with their intended major. In addition, transfer degrees allow for elective credit, which may include up to 12 credits in Career and Technical Education. Lower division courses taken at the community college may not meet the requirements of an upper- division course with similar titles and content; these courses, too, may transfer simply as elective credit.

Rarely are general education credits earned in the Oregon Transfer Module (OTM) or statewide transfer degrees "unpacked" such that they are not counted toward the satisfaction of general education requirements; however, the pre-aligned packages of general education provided in the degrees and the OTM were designed to accommodate the varying lower division general education requirements across the Oregon public universities. As such, students who intend to transfer from a community college to a university are highly encouraged to work an advisor in order to carefully and strategically select courses to meet degree requirements.

SUMMARY OF ACTION, RESEARCH, AND DISCUSSION PURSUANT TO HB 2525 (JULY 2015-APRIL 2016)

Since HB 2525's passage, the HECC agency has taken the following actions:

- Conducted extensive literature research concerning excess credit accumulation, credit loss, best
 practices for student transfer and articulation, barriers to successful transfer, indicators of successful
 transfer, and best practices for student transfer web portals.
- Consulted with and made targeted outreach to administrators, faculty, the Joint Transfer Articulation
 Committee, and the members of the Oregon Association of Collegiate Registrars and Admissions
 Officers.
- Convened a legislative workgroup including representatives from universities and community
 colleges, as well as other higher education stakeholders. Workgroup participants include but are not
 limited to Registrars, Provosts and Academic Officers, Deans, and specialists in their respective

- fields. The group met twice, in November 2015 and January 2016, with email and other communications between January and the present.
- Obtained a price quote for a statewide license for TES (Transfer Equivalency System) so that the state's public institutions can do transfer and equivalency articulation in a more systematic and standardized way.
- Partnered with a capstone group of Master of Public Administration students from the University of
 Oregon to conduct a qualitative research study. This research uses surveys and focus groups of
 students from Oregon community colleges and universities, and focus groups of transfer
 professionals, to research information on community college—university transfer concerns. The
 findings from the qualitative study are discussed below; the full study will be available on the HECC
 website.
- Formulated a joint data analysis effort between the HECC Offices of Research and Data, Community Colleges and Workforce Development, and University Coordination. This cross-office collaboration resulted in a research plan largely focused on resuming transfer student success reporting pursuant to the Transfer Student Bill of Rights and Responsibilities, the potential for new metrics indicating transfer student outcomes, and possible enhancements to the state's Data For Analysis (D4A) system to improve the ability to link information between community college and university data systems. Research questions are a product of HB 2525 and ORS 341.430 statutory language, workgroup conversations, and similar research studies in the states of Washington and Indiana. Data generated to date, and research questions of ongoing interest, are discussed below.
- Submitted new proposals related to transfer student success initiatives. These are detailed in "Recommendations," the final section of this report.

It should be noted that the HECC agency is a newly established, comprehensive state agency; this research report and related activities are its first attempt to systematically study and recommend changes to increase transfer student success. However, the challenges and tensions which have surfaced throughout the development of this report are not new concerns for Oregon's community college and university sectors. Furthermore, other states and national researchers have been focused on the systemic and other barriers that community college transfer students face, and several recent studies deserve attention to create a context for the history and current state of transfer student policy and practice in Oregon.

NATIONAL RESEARCH AND DISCUSSION ON TRANSFER

Recognizing the size and needs of the transfer student population, institutions, legislators and policymakers across the country continue to explore solutions to create seamless and well understood transfer pathways. Twenty-first century students need a twenty-first century transfer system, and the following section digests a selection of the latest research regarding transfer student demographics, barriers to successful transfer, and potential solutions.

The Transfer Playbook recently developed by The Aspen Institute's College Excellence Program and the Community College Research Center, authored by Wyner, Deane, Jenkins and Fink (2016) draws upon data from a 2011 National Center for Education Statistics study and notes:

• 81 percent of students who began higher education in 2003-04 at a community college indicated they intended to earn a bachelor's degree or higher.

• 14 percent of degree-seeking students who entered a community college in Fall 2007 transferred to a four-year college and earned a bachelor's degree within six years.⁵

The following statistics from the National Student Clearinghouse summarize additional key findings (NSCRC 2012):

- 33 percent of students transfer to at least one other institution during their postsecondary education (of fall 2006 student cohort)
- 37.1 percent of first transfers occur during the second year of postsecondary schooling, the most frequent year for transferring. Fifteen and one-half (15.5) percent occur in year one, 25.2 percent in year three, 13.3 percent in year four, and still another 8.9 percent in year 5.
- 74.63 percent of transfer students transfer just once; however, 16.97 percent transfer twice, and another 8.41 percent transfer three times or more.
- 43 percent of students transfer between public two-year institutions.
- More than 25 percent of transfers occur over state lines.

Students have complex lives and choose a variety of educational pathways. Using quantitative and qualitative data to understand the complexity of these pathways and choices will help the state, and institutions, to refine and strengthen existing approaches and to develop new policies and solutions that accommodate various "types" of transfers and result in improved outcomes for all.

Recent national studies across higher education sectors attempt to determine and explain transfer pathways, indicators of a successful transfer, and the various obstacles impeding successful transfer and baccalaureate degree completion. Findings from these studies are summarized below, and detailed in Appendix A. Themes drawn from the studies are reflected in later sections of this report, including the Recommendations.

Keith and Roska (2008) find that articulation policies are typically aimed at preserving credit hours during the transfer process; measuring the statutory effectiveness of articulation policies using transfer rates is likely misaligned with legislative intent. Although they hypothesize that state articulation policies will result in increased transfer rates, decreased time to bachelor's degree completion, and increased postsecondary degree completion, their results found that articulation policies codified in statute do not statistically have an effect on any of these metrics.

Attewell and Monaghan (2014) are largely able to discredit the notion that inferior academic preparation causes disparities in bachelor's degree attainment between students who begin postsecondary education at community colleges and those who begin at universities. The authors discuss evidence that credit loss for transfer students is common, and that significant credit loss upon transfer has an effect on the likelihood of baccalaureate completion.

Hillman, Quigley, Safman, Shea, and Turner (2014) discuss the benefits of inter-institutional articulation agreements over externally derived articulation policies (such as state-driven policies), as well as the importance of such agreements as a mechanism to minimize credit loss.

⁵ http://www.aspeninstitute.org/sites/default/files/content/docs/pubs/aspen-ccrc transferplaybook 05-2016.pdf

A 2014 Public Agenda qualitative study on student experiences transferring between Ivy Tech Community College and Indiana University found that students: are focused on degree completion; experience the course transfer and articulation process as a "maze, rather than a clear path"; are frustrated with minimal advising; and report that information on transfer and articulation is difficult to find, interpret, and that communication channels between institutions are often inadequate; these themes are echoed in the qualitative research for HB 2525 described later in this report. The Public Agenda report provides several recommendations to address these concerns, including: the provision of better and earlier advising; frequent degree audits to determine the transfer patterns in particular majors and pathways; early alert systems to help students track their own progress; and the establishment of data sharing agreements and timely, regular communications and convenings on transfer program requirements.

Washington State Board for Community and Technical Colleges (SBCTC) reports in 2010 and 2013 provide both quantitative and qualitative information on student experiences of transfer in that state. The research documents the successful outcomes for Washington transfer students: high rates of associate degree completion by transfer students; comparable credit accumulation upon completion of bachelor's degrees by students who completed associate transfer degrees at community colleges and those who began their studies at universities; and virtually equivalent GPAs in senior year. These outcomes are attributed by SBCTC staff to the efficiency of the state's Direct Transfer Agreements focused on particular pathways and statewide agreements on Major Related Pathways. The 2010 report also notes several non-academic factors found to impact transfer student success, including location and transportation; family obligations; full-time work obligations; future goals; useful cost of attendance information; and detailed information specific to students' majors.

Wyner, Deane, Jenkins and Fink (2016) outline in The Transfer Playbook strategies and best practices derived from partnerships of six community colleges with universities that, together, have been shown in National Student Clearinghouse data to serve transfer students especially well. Strategies for institutions from both sectors include making transfer student success a priority; creating clear programmatic pathways with aligned high-quality instruction; and providing tailored transfer student advising. The Transfer Playbook provides detailed steps for colleges and universities seeking to implement the essential practices identified, and synthesizes practitioner perspectives on both the benefits and challenges associated with state transfer articulation policies. Washington's transfer degrees and the major-specific program maps created by its four-year institutions are highlighted as an especially strong approach.

LEGISLATIVE AND POLICY HISTORY RELATED TO TRANSFER IN OREGON

The timeline below draws from and expands upon the background information provided to the legislature in the 2013 HB 2979 (Common Course Numbering, Equivalencies, and Outcomes) report. It provides a brief summary of statewide collaborative efforts regarding student transfer and success in Oregon, and indicates connections to key themes discussed after the timeline.

Theme A: Coordination, Alignment and Learning Outcomes

Theme B: General Education, Oregon Transfer Module, Statewide Transfer Degrees

Theme C: Common Course Numbering and Equivalency

Theme D: Information sharing and online systems/tools

 Table 1: Oregon Transfer Related Initiatives and Legislation, 1987-2015

1987	HB 2913 was passed by the Oregon Legislative Assembly. The bill called for a Committee to study common course numbering. During this time "outcomes" were not part of accreditation language. [Themes A, C]
1988	HB 2913 Committee completed the first AAOT Degree Standards. [Theme B]
1992	HB 2913 Committee completed the Common Course Numbering list. The Joint Boards Articulation Commission (JBAC) replaced the HB 2913 Committee and the University System/Community College Coordinating Committee. [Themes A, C]
1999	JBAC submitted Course and Credit Transfer Plan to the Oregon Legislative Assembly (HB 2387). Recommendations for continued activity included K-16 alignment, communication and access to student information, automated course equivalency and electronic degree audit system, ongoing data collection and research and a commitment to regional partnerships, coenrollment and dual-admissions programs. [Themes A, C, D]
2001	Catalogue of Lower Division Collegiate Courses (LDCC) was completed by CCWD. The document differentiated "college level" from "lower division collegiate course" and called for the alignment of community college courses with those offered at the state's universities. JBAC adopted a Credit for Prior Learning and Transfer Credit Limitation Policy. (The LDCC was later built into the process of adding/revising/deleting courses and programs in a program called the Oregon Community College Program Submission System also known as "Webforms".) [Themes A, B, C, D]
2004-05	JBAC established the Oregon Transfer Module. SB 342 called for the implementation of a statewide course applicability system (ATLAS) and alignment of AP, IB and Dual credit. JBAC also agreed to develop a shared set of Outcomes and Criteria for Transferable General Education Course in Oregon. [Themes A, B, C, D]
2007	Oregon became a Liberal Education and America's Promise (LEAP) state. AAOT was aligned to the learning outcomes and all 17 community colleges offer the AAOT with the same degree requirements. [Themes A, B]
2009	HB 3093 was passed and directed the Oregon Joint Board of Education to develop a plan for applied baccalaureate degrees in Oregon. SB 442 was passed and directed OUS on behalf of the Joint Boards of Education, to study approaches to increase student enrollment and success for rural Oregon students in institutions of higher education. [Theme A]

2010	Western Interstate Commission on Higher Education (WICHE) Interstate Passport initiative conceived. The initiative was created by WICHE states to advance policies that support seamless transfer of students in the region. Oregon began to apply for Degree Qualifications Profile (DQP), Core to College, Win-Win and Reverse Transfer grants; each in its own ways supported transition and transferability goals. CCWD launched the Oregon Community College Program Submission System also known as "Webforms" for course/degree submission. [Themes A, D]
2011	Transfer Student Bill of Rights and Responsibilities (HB 3521) was passed by the Oregon Legislative Assembly. The bill directed the Joint Boards of Education to articulate uniform protocols for transferring credits and provided for the development of Reverse Transfer programs. [Themes A, D]
2012	DQP Grant to the State of Oregon supported the exploration of five broad learning outcomes from Associates to Masters degrees. Associate of Science Oregon Transfer – Business (ASOT-Business) established by Oregon State Board of Education. [Themes A, B]
2013	HB 2979 established a workgroup to study how to implement common- course numbering for lower-division undergraduate courses. HB 2970 added language to the Transfer Student Bill of Rights and Responsibilities and called for the development of new transfer degrees. [Themes A, B, C]
2014	Associate of Science Oregon Transfer – Computer Science (ASOT-CS) established by the Higher Education Coordinating Commission (HECC) [Themes A, B].
2015	AAOT mathematics requirement is revised to reference the established outcomes and criteria for transferable General Education math courses; the revision provided for college math pathways to serve a broader range of students in addition to those preparing for College Algebra and a calculus-focused college mathematics. Oregon Administrative Rules restricting community colleges from the recognition of majors were lifted. HB 3335 was passed and focused on completion initiatives for adult students with "Some College, No Degree." HB 2973 was passed and focused on affordable baccalaureate degrees. HB 2525 was passed, the focus of this report. [Themes A, B, D]

This list of legislative efforts and state initiatives summarizes a long and multifaceted history to create workable frameworks for transfer and articulation across the state's public institutions. Taken as a whole, several persistent themes emerge from the array of initiatives, and these main ideas are explored in more detail below. Readers of this report who are aware of or participants in the history of transfer in Oregon will recognize them, and will note that many of the issues identified in previous legislation continue as areas of focus today in Oregon's higher education community, even as adequate funding to support and advance the work has been a persistent barrier.

Theme A: Coordination, Alignment and Learning Outcomes

As demonstrated in the timeline above, emphasis on university and community college coordination, alignment, and learning outcomes is pervasive in Oregon's history of statewide activity related to student transition and transfer, and continues in the present. Of particular note is Senate Bill 342, passed in 2005, which called for postsecondary education sectors to collaborate on particular alignment initiatives. These initiatives included the expansion of dual credit and other early college opportunities, development of the Advanced Placement statewide policy, expansion of career pathways, outcome-based alignment of general education courses, transferability of 100/200 level courses, revision of the Associates of Arts – Oregon Transfer (AAOT) degree into its current structure, and development of ATLAS.

Learning outcomes in this context differs from course objectives or competencies in that they are broad statements for programs of study, used to shape and define the curriculum, communicate expectations to the student, employer, and other educators about the program, and assess student progress. The aligned common learning outcomes for transferable general education courses in Arts & Letters, Cultural Literacy, Information Literacy, Mathematics, Science and Computer Science, Social Science, Speech/Oral Communication, Writing Oregon were approved by the Joint Boards of Education in 2010.

HB 3418 (2012) described the "poor management of transitions between educational institutions" due to information gaps and lack of coordination to assist students who are following the AAOT path. What was true in 2012 could also be said of the situation in 2016. The transitions between individual institutions with well-understood and well-managed articulation agreements and pathways, or postsecondary dual enrollment programs, may be functioning at a very high level. But the overall statewide coordination and data sharing to support robust, evidence-based analysis between sectors has been the subject of concern for decades, and in the past, little or inadequate funding has been allocated to make that "management" possible.

<u>Theme B: General Education, Oregon Transfer Module, Statewide Transfer Degrees</u>

Along with the identification of learning outcomes, General Education has likewise been a persistent focus in Oregon's history of work on transfer, and has guided the development of the transfer module and transfer degrees.6 Along with the General Education foundational skills and introduction to discipline courses which serve as the basis for the 45-credit Oregon Transfer Module (OTM), and the 90-credit AAOT which ensures that students have met all lower division general education requirements at the public universities, in recent years Oregon has developed more specialized Associate of Science - Oregon Transfer degrees. The intention of the ASOT degrees is similar to the AAOT in that the degrees provide for comprehensively recognized lower division coursework, but in these cases the requisite coursework is also designed to prepare students intending to major in specific fields at the baccalaureate level. Since both the lower-division and upperdivision coursework required to complete a major in a given field varies across universities, the established degrees include information on universities' program requirements and recommendations which must be regularly updated and communicated. Such information can assist students and their advisors in planning their courses of study, but it remains incumbent upon the student to seek and obtain advising from both the community college and the intended university to ensure efficiency and course relevance for any particular program and degree. Further detail on the current landscape of barriers related to statewide transfer degrees as we understand them today is provided in the next section of this report.

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⁶ http://handbook.ccwdwebforms.net/handbook/appendices/appendix-k

Theme C: Common Course Numbering and Equivalency

In 1987, House Bill 2913 required a study and implementation of a common course numbering (CCN) system. In an effort to fulfill legislative requirements a Commonly Numbered Course List was developed, functioning as a recommendation for institutions in the development and/or revision of academic programs. Some of the common numbering remains (e.g. Writing 121, Math 111). However, over time course numbering has evolved as colleges and universities grew; new faculty, administrators, and staff joined the ranks; and communication across institutions and sectors statewide was minimally supported and funded.

In the legislative report provided in 2013 as a response to House Bill 2979, which again called for strategies to develop and implement a common course numbering system, the HECC workgroup convened to address the bill requirements emphasized the history of Oregon's collaborative transfer work and the funding needed to truly bring about change:

The long term sustainable need regarding common course numbering is actually about common learning outcomes. There is an ongoing need to bring community college, university and high school faculty together to align course learning outcomes on a regular basis. This practice is found and recommended from other states that have alignment of common course numbering and equivalencies. The report on common course numbering needs to reflect the need for aligned outcomes and equivalencies; this intersectional effort will be referred to as Common Course Numbering/Equivalencies/Outcomes (CCNEO).⁷

Theme D: information sharing and online systems/tools

Numerous reports, legislative workgroups, and statewide policy documents between 2010-14 refer to the Articulated Transfer Linked Audit System known as ATLAS as the state's online transfer equivalency system to be used by students and advisors to map out efficient transfer pathways from the state's community colleges to universities. Its goal was to integrate unofficial student level course taking data with information about transfer, articulation and equivalencies across the Oregon University System. The project aimed to seamlessly integrate transfer information from community colleges to universities via voluntary data sharing and cooperation.

At the time of its implementation, the project had enthusiastic administrative and financial support from the Oregon University System Chancellor's Office, but had differing levels of support and implementation at the universities and community colleges. The project faced data format differences that challenged efficient sharing of information. Ultimately, the project was abandoned due to the platform's acquisition by a new vendor, triggering the need for extensive modifications that may not have resulted in its effective integration with all Oregon public universities and community colleges. These changes were coincident with an inevitable shifting of resources as the Oregon University System and Chancellor's Office were wound down in the transition toward the shared higher education coordination model under HECC. ATLAS's demise, however, does not change the fact that students, advisors, and faculty would benefit from a fully cooperative, integrated, web-based information system that, at a minimum, collects and classifies current information on course equivalencies, major related pathways, and degree options for transfer from one institution to another. This need is explored further below in this report and is the basis for one of the Recommendations that conclude it.

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⁷ http://library.state.or.us/repository/2013/201312051449274/

RECENT APPROACHES TO TRANSFER STUDENT CREDIT

Statewide transfer degrees and the Oregon Transfer Module

As described above, statewide transfer degrees satisfy the lower division general education requirements of baccalaureate degrees at the public universities in Oregon. They assure that a student who transfers to a university will be considered to hold "junior" status for registration purposes; they do not ensure that the student will hold junior-level standing in a particular major. The degrees were created to reduce bureaucratic obstacles for students transferring from an Oregon community college to a public university in Oregon, but the degrees alone do not ensure that students will complete baccalaureate programs within two years. All of the transfer degrees heavily emphasize to students the importance of working with advisors to thoughtfully and strategically develop degree plans. For example:

Although the AAOT provides an excellent structure for many students—particularly those who are unsure of their primary academic focus—it is not ideal for everyone. In particular, it does not articulate well with certain majors... In general, an AAOT recipient who is pursuing any course of study that is credit-heavy at the major lower- division level may have to take additional lower-division coursework, specific to the major, after transfer. Students contemplating such majors should consult closely with an advisor.⁸

In addition to satisfying lower division general education coursework, Associate of Science – Oregon Transfer Degrees in Business and in Computer Science are also intended to prepare students to transfer into upper division baccalaureate programs in those majors. These more specialized degrees include guidelines to advise students to understand university requirements and recommendations for the academic program the student wishes to enter, and to select courses for the ASOT degrees which align to the institution to which the student wishes to transfer, although the degrees do not guarantee admission to a specific institution or program. Students who do complete the degrees, meet the GPA and course requirements for entry into the major, and are admitted to the university and to the program, have junior standing for both the major and for university registration purposes.

The Oregon Transfer Module provides for the completion of a subset of general education courses, equivalent to three academic quarters, which all "count" as transferable to satisfy general education requirements. It satisfies the majority of university general education requirements, and represents approximately half of an associate degree or the first year of a baccalaureate degree. The OTM's primary benefits for students include improved efficiency in credit transfer between postsecondary institutions; an organized framework for student who have not determined their academic majors or who change majors early in their college careers; and provision of a reliable early start on a college degree for high school students who take OTM-approved coursework.

As it relates to efficient credit completion, however, the benefits of the OTM may be limited; use of the OTM as an organizing principle for general education solely reflects fulfillment of those general education

⁸ http://handbook.ccwdwebforms.net/handbook/definitions/associate-degrees/associates-of-arts-oregon-transfer-(aa-ot)

requirements without attending to the ways in which credit may/may not also fulfill destination institution, degree type, or major requirements and recommendations. Furthermore, evidence suggests that rather than serving as a stepping-stone to be completed early in a student's postsecondary education, students completing only the OTM (without also completing an associate's degree) do not typically complete the full module until after significant investment in their postsecondary education:

Table 2: Average number of credits that a student earning the AAOT or OTM completed at an Oregon community college

Year and Award Type	Number of Students	Lower Division Collegiate Credit	Career and Technical Education Credit	Development al Education Credit	Other Credit	Total Credit
2012-13						
AAOT	3,962	88.2	8.5	7.0	0.5	104.2
OTM only	975	89.2	9.0	5.3	0.1	103.6
2013-14						
AAOT	3,772	89.5	7.5	8.0	0.4	105.4
OTM only	1,170	82.7	9.3	5.7	0.0	97.8
2014-15						
AAOT	3,817	90.7	7.1	8.0	0.2	105.9
OTM only	1,131	90.5	7.1	7.3	0.1	105.0

Source: HECC Office of Research and Data, 4/22/16

RECENT EFFORTS TO ADDRESS TRANSFER PATHWAY PROBLEMS

In May 2015, HECC approved a rule change to OAR 589-006-0100 which removed the restriction on the designation of major areas of study in community college programs as a component of an Associate of Arts Oregon Transfer and Associate of Science degree award title.⁹ As described in the amended rule summary,

http://www.oregon.gov/HigherEd/Documents/HECC/2015%20Full%20Commission%20Meetings/05 May-14-15/9.1%20a.%20Staff%20Summary%20CH%20589-006-0100.pdf

the restriction posed a barrier to student success and degree completion: identifying a major and establishing an education plan is an important factor in retention and completion, facilitating smooth transitions between two- and four-year institutions. Community College Instructional Administrators and University Provost Council supported the rule change as a means to improve advising, transfer, and degree completion.

Following the rule change (and in addition to other drivers, including the sharpened focus on transfer brought about by HB 2525), the 2015-2016 academic year has seen a marked increase in communication and collaboration across postsecondary sectors regarding majors, major-related pathways, and established transfer degrees. For example, Dr. Stephen Scheck, Chair of the Joint Transfer and Articulation Committee (JTAC) and Provost of Western Oregon University, provided a memo in October 2015 on behalf of JTAC to the Oregon Community College Council of Instructional Administrators and HECC staff.¹⁰ The memo affirms JTAC's unanimous recognition of the value of transfer pathways to promote efficient and seamless transition for students. JTAC provides guidance on the possible development of majors at Oregon community colleges, recommending that majors: contain a common core of major-related coursework supported by both the community colleges and receiving institutions; be conservative in the variety of coursework offered; be informed by degree requirements at one or more Oregon universities, and follow the standard curriculum approval process at each community college. At JTAC's request, Dr. Scheck subsequently provided to the Committee a list identifying top receiving programs (majors) for community college transfer students matriculating to each of the Oregon public universities. The list, like the earlier memo, provides some important university guideposts and support for community colleges seeking to develop major-related pathways to improve student transitions and transfer between the sectors.

An additional influence in community colleges' recent approaches to rethink and improve student transfer is Bailey, Jaggars, and Jenkins (2015) Redesigning America's Community Colleges: A Clearer Path to Student Success. The book articulates a vision for "guided pathways"—clearer, more educationally coherent approaches to help students enter and complete college programs. The guided pathways approach to redesign "starts with the student's end goals in mind, and then rethinks and redesigns programs and support services to enable students to achieve these goals." (p.16) The book has ignited Oregon community colleges since its release: in October 2015, Linn-Benton Community College became one of only 30 colleges nationally to be invited to join the Pathways Project led by the American Association of Community Colleges (AACC). And Lane Community College hosted a presentation by one of its co-authors in February 2016, inviting representatives from all community colleges in Oregon to attend.

One of the hallmarks recommended in Redesigning America's Community Colleges is the use of clear program maps to define default sequences of courses for students. This recommendation is familiar to Portland State University (PSU), which has been working for over a year with many of its primary transfer partners on the development of program maps to completion of common majors. Several of the university's transfer degree maps are similar to degree maps developed for direct-entry students, here tailored to outline pathways specific to community college programs and seamlessly transitioning students into their corresponding majors at PSU. Other maps provide course transfer equivalency information, and serve as customized transfer guides. Transfer information is provided for several Business areas, one of the most common transfer fields across all universities.

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¹⁰ Scheck, Stephen. Recommendation Memo, October 19, 2015.

<u>Interstate Passport: A national approach to lower division general education</u> <u>transfer</u>

WICHE (Western Interstate Commission on Higher Education) is now completing the construction phase of its Interstate Passport, a learning outcomes (LO) based framework for lower division general education (LDGE). Passport's stated aim is to reduce the "unnecessary repetition" of courses by students after transfer. Participating institutions came together to work out learning outcomes framework based on LEAP Essential Learning Outcomes. Learning institution decides how their existing coursework fits into the framework, and whether they are willing to accept transfer students using the framework, with the understanding that incoming Passport students will not be asked to repeat any lower division general education coursework. This interstate framework for transfer accomplishes several policy goals for participating institutions. To investigate the efficacy of this transfer framework, participating institutions send and receive data to and from the National Student Clearinghouse on how students fare after transfer. NSC tracks the number of courses they take after transfer and their aggregate GPA for two terms after transfer. Those outcomes are compared across cohorts: Passport students versus "regular" transfers versus direct entry or "native" students. Passport is an innovative framework that answers two pressing needs:

- It alters the basis of transfer from course to course articulation to commonly agreed upon learning outcomes, thereby creating an evidentiary basis for pursuing similar types of experimentation and reform.
- Participating institutions create a transfer network without the need for complex individual articulation agreements, at least for LDGE. Sending institutions feel confident their students will be able to keep their lower division general education credits intact when transferring to another Passport institution.

Passport began in seven western states and is now spreading and becoming a national initiative, with Indiana and Ohio set to join.

Separate from but complementary to Passport is the Multistate Collaborative to Advance Learning Outcomes Assessment.¹² The project (MSC) is an effort by multiple states to assess college student learning outcomes at seventy-five percent of degree completion using authentic student assignments. MSC is demonstrating that it is possible to assess student learning according to a commonly accepted learning outcome framework without resorting to standardized testing or taking time away from the curriculum. MSC is in its second year; in total, ten Oregon institutions (from both the university and community college sector) are participating.

TRANSFER STUDENT PROBLEMS, POLICIES, AND SOLUTIONS

CURRENT EVIDENCE OF TRANSFER STUDENT PATHWAY PROBLEMS: CREDIT ACCUMULATION PATTERNS

House Bill 2525 was in part prompted as a response to anecdotal and other evidence of transfer student pathway barriers or inefficiencies between the state's community colleges and public universities. This concern heard by the legislature was echoed by academic leadership and other student service professionals as they noted that the statewide degrees such as AAOT or the ASOT degrees in Business and Computer

¹¹ www.aacu.org/leap

¹² www.sheeo.org/msc

Science, designed to be applicable, predictable, and efficient, were not functioning as intended. HECC staff approached academic leaders from a number of institutions and heard similar concerns expressed. Administrators from Portland State University generously provided their own research and data analyzing student credit accumulation patterns compared across several types of degrees in a few select majors.

Credit accumulation by students (credits acquired versus the number needed to obtain a given degree) has been used recently as a proxy measurement for overall systemic efficiency in higher education: Are students getting degrees in the most efficient way possible, given the financial resources required and the time spent outside the labor market? (Zeidenberg 2012). It must be noted that credit accumulation is an imprecise instrument for measuring student outcomes. Students are human beings who make choices, not all of them in the name of efficiency. Certainly, not all credits accumulated beyond those required are "bad" or to be regarded as "wasted" time or money. But the HB 2525 workgroup was interested in learning whether patterns of credit accumulation could tell us anything about the outcomes transfer students faced as they moved from community college to public university. Typically, do transfer students have to take more classes, spend more money, and take more time than necessary to achieve the same result as direct entry or "native" students? Are there notable differences in these outcomes between students who take a statewide transfer degree (AAOT or ASOT) and other types of transfer students? By focusing our attention on results and outputs, we can perhaps understand better what barriers or systemic challenges transfer students typically face as they move from one sector to another and approach graduation.

PCC's Analysis of the AAOT Degree Pathway to Oregon Public Universities

Portland Community College (PCC) Director of Curriculum Anne E. Haberkern completed an analysis of the credits required for a PCC student who takes an AAOT and then transfers to an Oregon university must complete to fulfill the specific course requirements for a bachelor's degree in two popular majors (English and Biology), and then compared those numbers with the number of credits required by the same student, in the same major, completing a PCC Associate of Science degree, and the number of credits a direct entry or "native" student would be required to complete. In other words, Haberkern compared the number of credits a student would accumulate with an AAOT as the transfer mechanism, versus an AS degree. Her findings, while preliminary and in need of further analysis, were striking nonetheless. She notes, "At all institutions except WOU, a PCC student with an AAOT acquires more excess credit (in several cases, quite a lot more) en route to transfer than a PCC student with an AS pursuing the same major/degree, assuming both students select their courses as efficiently as possible." That is, due to the number of classes required to complete an AAOT, a student majoring either in English or Biology, coming from PCC typically will have to complete credits in excess of the same student completing an AS, even if they do everything "right" -- that is, maintain a strong grade point average, make timely progress toward the degree, stick with the major once they transfer, and so on. Table 3 summarizes this analysis below.

Table 3: Credits Required to Make Progress to Degree, Compared by Pathway from PCC to "Native" Students

Minimum Credits to complete all specific requirements for a "native" student at the Oregon University	Minimum for the PCC-AAOT vs. "native"	Minimum for the PCC-AS vs. "native"
PSU BA-English – 145 minimum credits	+12	-7
PSU BS-Biology – 168 minimum credits	+7	-7
UO BA-English – 125 minimum credits	+34	+14
UO BS-Biology – 151 minimum credits	+17	+9
OSU BA-English – 144 minimum credits	+10	+6
OSU BS-Biology – 156 minimum credits	+23	+11
WOU BA-English – 175 minimum credits	-2	+6
WOU BS-Biology – 148 minimum credits	+4	+14
SOU BA-English – 146 minimum credits	-1	-7
SOU BS-Biology – 168 minimum credits	+4	+3
EOU BA-English – 106 minimum credits	+45	+27
EOU BS-Biology – 124 minimum credits	+32	+13

Across all academic areas in Lower Division General Education, the statewide transfer degree requires more credit to complete the degree and major requirements than any of the four year institutions require in either English or Biology (with the exceptions of English at Southern Oregon University and at Western Oregon University). While it is not certain that an AAOT student will accumulate excess credit, the AAOT student has much less room for requirements and electives than a direct entry or AS student. Each four-year institution has some lower division requirements -- either for the degree or for graduation -- that are not waived for AAOT completers. The AAOT is meant to ensure that a student has completed all lower division general education, enters with junior status, and is well-prepared to enter a variety of majors the liberal arts and sciences. This analysis of the AAOT suggests "that as currently structured, the AAOT can result in more excess credit for students than other transfer degrees, to the point that the value of the AAOT's benefit for many students is arguably outweighed by its cost." 13

¹³ Haberkern, Anne E. Email communication, March 28, 2016.

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PSU's Analysis of the ASOT-Business Pathway

The Office of Institutional Research & Planning at Portland State University completed an analysis of credit accumulation by Business majors from 2010-2015, focusing in particular on differences in credit accumulation by transfer students who come to PSU from PCC with the AAS, AA, ASOT-Business, and AAOT.

The analysis looked at credit production by approximately 3,752 transfer student graduates from PSU's School of Business Administration between 2010 and 2015 (out of approximately 10,000 total graduates). The main inquiry was "Do the students who come [to PSU's School of Business] with the ASOT-Business complete a degree with fewer excess credits than those who complete with a different transfer degree, or no transfer degree at all? What are the number of credit these students typically end with at graduation?"

The findings were that, strictly speaking, none of the transfer pathways analyzed could be considered "efficient" in terms of credit accumulation. All pathways were completed on average with 210 credits or more (180 is the minimum required). The results are summarized in Table 4, below.

Table 4: PCC to PSU School of Business, Credit Accumulation Totals

PCC Transfer Degree Type	Average Credits Per PSU SBA Degree (2010-2015)
Associate of Science	210
Associate Degree - General	211
ASOT - Business	212
Not Declared/No degree	212
AAOT	224
Associate of Applied Science	239

Source: Portland State University

As the table above shows, the ASOT-Business results in no more an efficient pathway for the majority of students who use it than an Associate of General Studies degree, or indeed, no associate's degree at all. There may be several explanations for this. The ASOT-Business may be "bottom heavy" on lower division general education requirements, in excess of those normally required by the receiving institution. Students may be taking extra courses outside of the basic requirements for the ASOT-Business. In any event, there appears to be no truly "efficient" transfer pathway from PCC to PSU's School of Business. There were no credit accumulation comparisons for "direct entry" PSU students who graduate from the School of Business, but

PSU's Office of Institutional Research reports that, university wide, first time freshmen students who complete a bachelor's degree graduate with an average of 187 credits across all majors.¹⁴

Analysis of Statewide Credit Accumulation Patterns

It is difficult to match credit accumulation for large numbers of students who attend at least one Oregon community college and graduate from an Oregon public university; the statewide community college data system and the statewide university data system have been historically discrete. The new statewide higher education data system, Data For Analysis (D4A) will in the near future be able to track these student outcomes more accurately.

For this report, we asked the HECC Office of Research and Data:

How many "excess" credits (i.e. more than 180 required) do transfer students of all kinds
accumulate before taking a bachelor's degree? Is that figure greater or smaller than the number
of credits accumulated by "direct entry" or "native" students who graduate from the same
institution?

A preliminary analysis of credit accumulation data comparing transfer students of all kinds with direct entry students shows that on average, between 2011 and 2014, Oregon transfer students of all kinds acquired 7.6 more credits per Bachelor's degree to complete, with transfer students from other states needing even more (11.6).

Table 5: Credit accumulation at bachelor's degree, by student type

2011-12 through 2013-14	Bachelor's Degree Recipients	Average Transfer Credits	Average total Credits at Degree
Sector Total*	36,055	60.4	208.2
Oregon CC Transfer	11,788	104.4	211.9
Other college transfer	6,696	99.1	216.7
From HS or GED	16,119	20.8	204.3

Source: HECC Office of Research and Data

* "Sector total" includes university-enrolled students whose admissions source is unknown, as well as graduate and post-baccalaureate students. "Oregon CC Transfer" indicates students who attended at least one Oregon community college and transferred with at least thirty credit hours.

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¹⁴ Sanchez, Becky. Email communication, January 15, 2016.

Although seven or eight credits may not sound like a lot (roughly two courses), it equates to roughly \$1,250, plus fees, books/supplies and other costs per course (assuming in state tuition at a public university). Put another way, transfer students accumulate roughly 18% or 31 "excess" credit per degree (over the standard 180). ¹⁵ That equates to roughly \$4,600 in extra tuition, not including fees, books/supplies, and other costs (time, opportunity cost) associated with course taking. Neither of these figures may be particularly striking --but cumulatively, Oregon transfer students spent tens of millions of dollars more than necessary to achieve graduation between 2011 and 2014. ¹⁶

Clear from the patterns outlined here, at both statewide and institutional levels, is that the transfer student pathway is not systemically efficient, when measured in total credit accumulation. What is more clear, however, is the pressing need for improved data collection and reporting, and robust analysis on transfer student outcomes. While transfer students as a population take longer to get to degree, and spend more time and money to get to degree, credit totals alone will not reveal why this is the case. We cannot discern from the figures how many transfer students deliberately choose to prolong their studies, aware of the cost in time and expense. Reasons for this could include goals to complete a double major, a minor, or simply to take extra courses of interest, in order to round out a full-time schedule. We cannot discern how many transfer students are "spinning their wheels" due to inadequate advising resources, inaccurate or inaccessible information, schedule conflicts, or misaligned degree requirements between the community college and public university sectors. Anecdotal evidence and student experiences revealed in focus groups (detailed below) suggest the latter reasons are more common than the former.

QUALITATIVE ANALYSIS: STUDENT FOCUS GROUPS FROM OREGON, MARCH-APRIL 2016

Pursuant to HB 2525, HECC agency staff connected with Masters in Public Administration students from the University of Oregon to undertake qualitative research on transfer student experiences. The MPA students, faculty advisor, and HECC staff collaborated on a set of research questions, survey instrument, and developed contacts at four institutions: Lane Community College, Linn-Benton Community College, Oregon State University, and University of Oregon.¹⁷

The research questions were:

• What do transfer students at key stages of their academic progress tell us about their experiences with regard to transferability of credits, effective practices that aided their academic progress, or barriers they encountered specific to transfer or articulation of course credits?

¹⁵ HECC staff attempted to analyze and compare credit accumulation patterns for transfer student types: AAOT, AS, non-degree transfer students who accumulated at least thirty or more hours, and direct entry students using totals that were matched to unique student identifiers between 2007 and 2015. The analysis revealed, broadly speaking, that *all* students accumulated 22-26 "excess" credit hours per degree, with transfer students accumulating the most. Inconsistencies were discovered in reporting totals for one of the institutions, however, casting a measure of doubt on use of the data set as a whole.

¹⁶ Calculated as thirty-one average credit hours multiplied by 11,788 Oregon transfer students, at a per credit hour cost of \$156 gives a hypothetical total of over \$54 million. This information also highlights the need for ongoing research/improved data system linking to better understand the spectrum of student experiences of excess credit, as discussed below in the "Recommendations" section.

¹⁷ The complete research report to be linked on the HECC website (Austin, Henson & Wiroll 2016).

• How can institutions or HECC assist with policies or practices that encourage transferability of coursework or timely information on applicability of credits?

The researchers held student focus groups at the four campuses, collated and analyzed those responses according to persistent themes, and developed a set of recommendations for HECC agency staff and the Legislature. The four researchers also met with advisors and other academic service professionals to learn their perceptions of the effectiveness of the current transfer system as practiced in Oregon.

The research uncovered four persistent themes in student responses:

- 1. Inconsistent and inadequate access to advising was a barrier for students who planned to transfer from two year to four year institutions.
- 2. A perceived lack of resources for transfer students at the universities left students feeling unsupported.
- 3. Lack of information or understanding about how academic credit accumulation affects financial aid eligibility.
- 4. Lack of information or awareness of information resources related to transfer delayed students' transfer and completion.

The UO Report is well worth reading in full for its insights on student and staff experiences negotiating the tangle of transfer pathways. But this last finding (number 4) is of particular interest, in that nearly all success metrics for transfer students hinge upon access to timely, accurate, and actionable information. For the student who is in between sectors (neither admitted to university nor currently enrolled in a community college), or for undecided students who have not yet selected a major, information on transfer can seem to be everywhere and nowhere at once. Students in the focus groups reported difficulty finding specific information on the transferability and applicability of the Associate of Arts Oregon Transfer, on specific majors, and on how to create an actionable transfer plan. Others mentioned outdated articulation agreements found online, and using these as the basis for an academic plan. As the report notes, "A number of students reported 'googling' the requirements, and piecing them together between various online resources and information from peers" and knowledgeable faculty (Austin, Henson, & Wiroll 2016, p. 9).

Nonetheless, there was ample testimony of students' overall satisfaction with community college and university study and student services. And in spite of the difficulties some students experience in the transfer pathway, many students positively view community college as a way to explore a number of different major areas, without preconception or plan. With the advent of major related pathways in Oregon community colleges and universities, effective advising and accurate information will become more important to student success than ever.

The University of Oregon researchers make several recommendations to HECC staff pertaining to funding, transfer student resources and intake orientations, and, significantly for the current report, "a statewide portal that tracks students through their time in higher education in Oregon" (p. 15).

BARRIERS TO EFFICIENT TRANSFER IN OREGON

Lack of a Common Statewide Transfer Student Information System or Portal

With the demise of ATLAS, Oregon lacks a common statewide transfer student online information and degree audit system as are found in forty-one other states. As transfer students and non-traditional students continue to comprise a large proportion of the student population, particularly in light of the Oregon Promise program, an accessible and user-friendly statewide online portal has the potential to provide immense benefits to transfer students. The HB 2525 workgroup has communicated interest in further researching the possibility of a statewide transfer portal, its cost and feasibility, and how the portal could be used to communicate with students and ease the transfer process.

HECC staff conducted a nationwide review of all web portal and online resources states offer to transfer students. The review examined all fifty states and weighed the relative merits of different information systems, which produced a number of best practices and cutting-edge online student resources. While vast disparities regarding the quality, robustness, and accessibility between state web portals exist, common themes are apparent in the top-tier developments. These best practices include:

- A web platform separate from the administrative agency hosts the web site/ portal
- Strong collaboration among institutions or centralized higher education governance exist
- Advanced website development and interface evident
- Technical support from third parties such as College Source or College Transfer present

Three states stand out among these best practices for their comprehensive information and transfer guides, multiple equivalency tools (e.g. exams, courses), and state-of-the-art web interface platforms: Pennsylvania, South Carolina, and Arizona. As an example, South Carolina offers a complete student transfer web portal, operating on a separate web platform from the Commission on Higher Education, called the South Carolina Transfer and Articulation Center (SC TRAC). SC TRAC is the product of collaboration among participating private and public institutions, including 13 universities and 16 colleges. Aside from equivalency tools, SC TRAC provides one of the most robust information offerings for students, which includes detailed steps to successfully transfer, a Transfer Event Calendar, universal course equivalencies, and available transfer and program agreements between institutions and eligibility requirements. While almost all information is fully embedded into the website, SC TRAC offers direct reroutes for several online resources. Information is provided in a digestible manner. The site offers additional resources for faculty, advisors, and administrators (PESC 2011).

State web portals are diverse in their scope, funding, and functional use. Most states strive for a comprehensive, statewide portal encompassing most in-state public institutions. States also differ as to whether public institution participation is mandatory and whether efforts encourage private in-state or out-of-state institution participation. Regardless of scope, generating institutional buy-in is critical due to the dependence on institutions to update course equivalencies. Funding is largely derived from state appropriations, and grants; other alternative financing methods may be used. McGill also finds states nearly split on the use of commercial or home-grown web portals out of a survey of 24 states. States differ in the array of web portal tools they offer from personal user accounts and customizable views of course and program information to online access to articulation agreements and financial aid information. Several states

streamlined college application and transcript services into their portals, resulting in a "one-stop shop" (McGill 2010).

<u>Experimental Student Profile: Transfer Student Experience Searching for Information</u>

Seeking insight into the experiences of students who are searching for information online, HECC staff assumed a transfer student "profile" and made a brief experiment, comparing the ease of use for transfer and articulation web searches in Oregon (with no centralized web portal) and using South Carolina's SC Transfer portal.

The following criteria and characteristics were used when conducting this informal assessment of transfer student information utility and availability.

Table 6: Transfer Student Profile Experiment Characteristics & Findings

SOUTH CAROLINA - using https://www.sctrac.org/

Student profile:

- · Adult
- · Female
- No prior college
- · Wants to pursue AA at a community college
- Wants to transfer to university for a BA in Psychology

Schools:

- Central Carolina Technical College (AA liberal arts)
- · University of South Carolina (BA)

Cost Analysis

- * \$170/cr. @ CCRC*62 for AA = \$10,540
- \$461/cr. @ USC*53 (approx.) for Core = \$24, 433

Time Spent on Research

- · Approx. 65 mouse clicks
- 1 hr. 20 minutes

OREGON - using institutional websites Student profile:

- Adult
- · Female
- No prior college
- · Wants to pursue AAOT at a community college
- · Wants to transfer to university for a BA in Psychology

Schools:

- · Oregon Community College¹⁸ (AAOT)
- Oregon Public University (BA)

Cost Analysis

- \$118/cr. @ CC*90 for AAOT = \$10,620
- * \$381/cr. @ OPU*68 for Lower Division
- = \$25,908

Time Spent on Research

- Approx. 72 mouse clicks
- · 2 hr. 30 minutes

HECC Research and Policy Analyst Betsy Simpkins writes of her experience searching for information as a transfer student from South Carolina versus a student from Oregon:

¹⁸ The Oregon institutions were de-identified for this portion. The point of the experiment was to gain insight as to systemic information deficits or strengths, not to subject one or two institutions to scrutiny.

I set out to see how an Oregon transfer student might navigate all the options compared to what a student in South Carolina might experience . . . Overall, the experience with Oregon schools was time-consuming, confusing and required a lot of digging in the various institution websites. I found it particularly frustrating that the "transfer" web pages on the institution sites contained very little information at all, forcing me to go back and forth between the schools to figure it out on my own.

In contrast, the South Carolina Transfer Center allowed me to easily find course equivalencies between the schools I was interested in . . . Although not perfect, it was a much simpler and centralized interface that allowed me to get essentially the same information in a shorter amount of time.

In short, having a centralized repository of articulation agreements or course equivalencies is a great improvement over the scattered way Oregon provides information. However, what would be even better is a tool that could evaluate "what if" scenarios so that I could plug in a class from a particular school or a potential degree at a university and it could produce a map of what my education plan would look like with that scenario.

This analysis should be taken as suggestive rather than dispositive. There are myriad factors that either aid or hinder a student as she seeks and finds accurate and actionable information on transfer and course articulation. What is clear, however, is that a majority of states with community college to university pathways have found it worthwhile to invest in a common information platform to aid students as they (and their advisors) navigate the transfer student information ecosystem produced by dozens of different institutions within a given state.

The confusing array of transfer pathways and individual articulation agreements

In addition to the above statewide comparison analysis of web portals, HECC staff researched the myriad existing articulation agreements and transfer pathways in Oregon. These agreements and pathways appear well-intentioned, however, articulation agreements are not developed or provided with an eye toward student use: they are exceedingly difficult to find online and complex to comprehend. Without significant advising support, the average student is unlikely to independently succeed in finding a particular transfer pathway between two institutions, interpreting her requirements to transfer, and successfully transferring to an institution carrying the "right" amount and type of credits. This confusing web of agreements highlights the need for Oregon to take steps to streamline information that is easily accessible and comprehensible to all students.

PRINCIPLES FOR TRANSFER STUDENT SUCCESS & COORDINATION

A transfer student "bill of rights" must rest on sound principles that can find universal support and agreement from all sectors of public higher education. Statewide transfer student success policy makers, and

institutions, may best assist students with the following principles as the foundations of statewide and local efforts:

- Because transfer students are more likely to be first generation students, under-represented
 populations, and/or financially constrained¹⁹ than other student populations, an equity-focused
 statewide student success policy must give special emphasis to the needs of students transferring
 from community college to university.
- A student's progress from an Oregon Community College to an Oregon Public University should be unencumbered by unnecessary obstacles.
- Information on statewide transfer degrees, course equivalencies, the various institutional
 requirements, articulation agreements, dates, deadlines, and processes should be accessible, available,
 and understandable for all students, families, advisors, educators, and administrators regardless of
 sector, status, or geographic location.
- Lower division general education acquired at any public post-secondary institution in Oregon should
 continue to transfer as a block to any other public post-secondary institution, based on a commonly
 accepted framework of requirements and learning outcomes.
- Decisions on statewide transfer student success policy should be:
 - based in the best available data on retention, completion, and time to graduation (including accumulation of excess credits); and
 - based on strategic collaboration between universities and community colleges with state agencies. Stakeholders should include: academic leadership (including faculty), registrars, advising professionals, institutional researchers and policy experts.

RECOMMENDATIONS

The charge of HB 2525 was to "recommend processes" to ensure that students do not unnecessarily repeat coursework after transfer, and to ensure that similarly sufficient courses are treated as equivalent. This report's recommendations will be familiar to those who have been following the state level conversations and legislation related to transfer for the last two decades.

Assess and Update the Statewide Degrees

Convene faculty, academic leaders, registrars, advisors and others to examine the effectiveness of statewide transfer degrees (AAOT, ASOT-Business and ASOT-Computer Science) and realign their requirements to existing and new bachelor's degree requirements. That process of "realignment" might include removal of unnecessary complexity to facilitate successful student transfer.

Support the Implementation of Community College Majors, "Metamajors," and Guided Pathways

Allocate resources for travel and virtual convening for high school, college and university faculty and administrators for the alignment work recommended above.

¹⁹ Pazich & Bensimon (2010).

• Enhance Information Systems: Transfer Equivalency System (TES) for the State's Public Institutions

The state should purchase a state-wide license for College Source TES. The state's community college and university registrars are in favor of a common transfer and articulation information platform to perform course to course articulation in a standardized, uniform way. College Source recently provided a price quote to a representative of the statewide registrars group of \$185,924 as an annual cost for all twenty-four public institutions.

• Convene a Technical Workgroup to Study and Make Recommendations for a Robust Statewide Transfer Student Information System

Given the technical and administrative challenges associated with a statewide transfer student information system, a technical workgroup made up of academic administrators, IT leaders, and registrars should study this issue in greater depth, and report on the probable costs and data format challenges that would need to be overcome.

• Research, Tracking and Reporting on Transfer Student Outcomes to Improve Pathways

House Bill 2525 called for a new "research plan" to understand statewide transfer student outcomes. That research plan should include new data and ongoing reporting on the different types of transfer degrees, and the outcomes faced by students who follow the various transfer pathways from community college to public university, comparing:

- o accumulated credits to degree for transfers of all kinds versus direct entry students
- o accumulated credits to degree for AAOT completers versus direct entry students
- accumulated credits to degree for students with credit earned (9+) in HS versus students without such credit

With these and other data points, there is a need to investigate how much "excess" credit is generated due to inadequate transfer resources, inaccurate or inaccessible information versus how much is voluntary and understood (i.e. a student taking a double major).

To implement these recommendations, a full-time state-level staff person should be funded and be responsible for convening the academic areas (writing, math, psychology, history, etc.) to ensure that course outcomes, equivalencies and (where agreed upon) common course numbering remain aligned. It is recommended that this person have experience in learning outcomes and assessment. This full-time staff could assist in other curriculum/credit areas that connect to learning outcomes such as dual credit, Credit for Prior Learning (CPL), Advanced Placement (AP) and International Baccalaureate (IB) alignment that all require a yearly review and updating with faculty, colleges and universities.

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APPENDIX A: LITERATURE REVIEW

Attewell and Monaghan (2014), "The Community College Route to the Bachelor's Degree."

Attewell and Monaghan's research explores potential mechanisms generating the disparity in bachelor's degree attainment between students who begin their education at a community college versus those who begin at a four-year institution. The national bachelor's degree attainment gap between these two populations is reported at 17 percentage points, with community college students at the disadvantage.

The authors are largely able to discredit the notion that inferior academic preparation causes this gap; the degree attainment gap largely disappears when a community college student successfully transfers to a four-year institution. However, many students who indicate a desire to transfer do not do so. Nationally, only 60 percent of students who accumulate 60 or more credits and indicate a desire to transfer to a four-year institution do so successfully.

One explanation for the degree attainment disparity may be credit loss. The authors note:

- 58 percent of students lose 10 percent or fewer credits during the transfer process
- 28 percent of students lose between 10 and 89 percent of accumulated credits
- 14 percent of students lose essentially all credits

If policies were in place to stem the loss of credits from 42 percent of transfer students, bachelor's degree attainment rates among community college students would increase 10 percentage points, 45 percent to 55 percent. Additionally, the authors find an effect of credit loss on the likelihood of graduation: students who transfer with almost all credits have 2.5 times greater odds of graduating than a student who transfers with less than half of accumulated credits.

Hillman, Quigley, Safman, Shea, and Turner (2014). "Successful Student Transfer: A Key Building Block of the Completion Agenda."

The authors advocate changing the transfer process from a "stumbling block to a building block" of degree completion. A key component of the report discusses the benefits of inter-institutional articulation agreements over externally derived articulation policies (such as state-driven policies), as well as the importance of such agreements to minimize credit leakage. The authors discuss articulation agreements beyond traditional course equivalencies, which they posit as ideal for an earlier era when transfer was localized and between fewer institutions. Programs and initiatives centered on learning outcomes and competency-based education models are discussed as possible alternatives. Four initiatives are highlighted, with common themes including: a concern with delivering, ensuring, and assessing the quality of general education; reliance on the AAC&U's LEAP Essential Learning Outcomes; and a focus on assessment in either a classroom or programmatic method.

Keith and Roska (2008), "Credits, Time, and Attainment: Articulation Policies and Success After Transfer." The authors examine state-led articulation policies and the intent of such legislation; they find that articulation policies are typically aimed at preserving credit hours during the transfer process, rather than intending to increase transfer rates. Measuring the statutory effectiveness of articulation policies using transfer rates is likely misaligned with legislative intent.

The authors hypothesize state articulation policies codified in statute that emphasize the preservation of credits will produce the following effects: (1) increased transfer credit rate to four-year institutions; (2) decrease the time needed to complete bachelor's degree, and (3) increase college completion rates. However, their results show that articulation policies codified in statute do not statistically have an effect on any of these student success metrics.

The authors cite the need to acquire more and better-quality data to accurately evaluate articulation policies. Additionally, a need exists to include informal, collaborative articulation policies between institutions in future research studies. Further research measuring the extent of student knowledge regarding articulation may also be beneficial.

Public Agenda (2014), "Indiana Regional Transfer Study: The Student Experience Between Ivy Tech Community College and Indiana University."

The Public Agenda report revealed four consistent themes in this qualitative study of transfer student experiences:

- Students are focused on degree completion, both associates and bachelors, believing that degree completion is "increasingly essential in today's economy."
- Students experience the course transfer and articulation process as a "maze, rather than a clear path"
 losing time and money because many of the courses they thought would count toward degree requirements end up being counted as electives. For these students "elective" has lost its intended meaning, becoming instead a bucket for courses that students mistakenly believed would count toward degree requirements.
- Students report frustration with advising, while advisors complain of large caseloads and inconsistently reported requirement changes. Students who form personal connections with faculty advisors tend to report being satisfied with the transfer process.
- Students report that information on transfer and articulation is difficult to find, interpret, and that
 communication channels between institutions are often inadequate. Where information resources do
 exist, students often remain unaware of them and they remain underutilized. The inability to
 consistently find and use transfer related information resources becomes an unintended barrier for
 many students.

The report makes a number of suggestions and recommendations for further research and improvement in several key areas: Pathways, Advising, Communication. These include:

- Provide better and earlier advising;
- Perform frequent degree audits to determine the transfer patterns in particular majors and pathways;
- Help students track their own progress with "early alert" systems;
- Establish data sharing agreements, and timely, regular communications and convenings on transfer program requirements.

The Public Agenda report is perhaps instructive in that Indiana's higher education system mirrors that of Oregon in several respects: like Oregon, Indiana has some good state level transfer policy frameworks such as a course equivalency "library," and a common lower division general education core (similar to the OTM);

Indiana's state level coordination is likewise highly decentralized. Furthermore, the Public Agenda report reflects themes from the qualitative research conducted in Oregon for HB 2525.

Washington State Board for Community and Technical Colleges (SBCTC) (2010), "What Well-Prepared Transfer Students Tell us about Strategies to Remove Barriers to Transfer."

Similar to Oregon, Washington's higher education state agencies have adopted a goal of greater numbers of students transferring from community college to university, with better aligned, more seamless pathways. Washington undertook a new qualitative study of transfer student experiences in 2010, and compared those findings with those of previous state-level and national studies on transfer student barriers.

Their conclusions are well-noted for including the non-academic and non-policy factors that either impede or facilitate transfer student success. Key findings include:

- Location and transportation matter: Colleges that are closest to public universities in Washington have the highest transfer rates; those that are furthest away have the lowest rates of transfer.
- Family obligations matter, particularly for female students; women with children have a lower successful transfer rate than male counterparts.
- Full time work obligations matter, especially for students who are adults in the workforce (25 and older).
- Goals matter for successful transfer: Students will often wait until they have clarity about their future goals before transferring.
- Students need information about the true net Cost of Attendance: Tuition rates alone do not accurately convey the cost of a degree, and students need information about available aid as grants or loans before they can make informed decisions.
- Students need information specific to their majors to transfer successfully: At the time of this report, students were not consulting degree evaluation tools online, and had difficulty finding good information online to prepare them as transfer students to enter a particular university major.

The 2010 SBCTC report also analyzes credit accumulation patterns and associate degree attainment factors that affect transfer and bachelor's degree attainment. Significantly, students in Washington who attain a Direct Transfer Agreement (DTA), an associate degree designed to transfer to most Bachelor of Arts degrees at all four-year colleges and universities in Washington state, transfer to university at much higher rates than their counterparts who do not complete a degree at community college. Those who obtain specialized statewide DTAs in STEM or Business transfer successfully at rates between 81 and 91 percent over a period of five years. Students who accumulate 75 or more quarter credits without taking a degree transfer at much lower rates, between 41 and 52 percent (SBCTC 2010, p. 7). Washington's SBCTC did a follow up study to this one, using data from several sources to examine educational outcomes, described below.

Washington SBCTC (2013), "The Role of Transfer in the Attainment of Baccalaureate Degrees at Washington's Public Bachelor's Degree Institutions Class of 2011."

This 2013 study tracked outcomes for the class of 2006, with populations sorted by transfer pathway. The study used "excess credit accumulation" and senior year GPA as the points of comparison between transfer and direct entry students. Key findings include:

• Two-year degree paths proved efficient for CTC transfer graduates: Seventy-nine percent of CTC transfers completed an Associates of some kind. Those who completed a Direct Transfer Agreement

- (DTA) in Business or STEM were very successful in completing a Bachelor's degree (80-90 percent success rate).
- Median credits earned for degree completion were comparable across all majors for CTC transfer and direct-entry bachelor's degree graduates. Students who don't finish a degree before transfer accumulate more excess credits than those who do DTA or AA (fig. 24-25, p. 25).
- Senior year GPAs were virtually equivalent across all fields for those who complete a transferable associate's degree.

These apparently successful outcomes for Washington transfer students are typically attributed by SBCTC staff to the efficiency of the state's Direct Transfer Agreements that are focused on particular pathways such as Science/Engineering or Business, and statewide agreements on Major Related Pathways. Further lessons from the Washington report are incorporated into the Recommendations section of this report.20

Wyner, Deane, Jenkins and Fink (2016), "The Transfer Playbook: Essential Practices for Two- and Four-Year Colleges."

The Transfer Playbook is based on best practices derived from partnerships of six community colleges with universities that, together, serve transfer students well—National Student Clearinghouse data for these institutions indicate higher than expected rates of bachelor's degree attainment for transfer students given their student demographics and institutional characteristics. It is organized around three broad strategies, with essential practices underlying each:

Strategy 1: Make transfer student success a priority

- Communicate transfer as a key component of the institution's mission.
- Share data to increase understanding of the need to improve transfer student outcomes—and the benefits of doing so.
- Dedicate significant resources to support transfer students.

Strategy 2: Create clear programmatic pathways with aligned high-quality instruction

- Work collaboratively with colleagues from partner institutions to create major-specific program maps.
- Provide rigorous instruction and other high-quality academic experiences to prepare students for four-year programs.
- Establish regular, reliable processes for updating and improving program maps.
- Design unconventional pathways, as necessary.

Strategy 3: Provide tailored transfer student advising

Community college advising practices:

• Clearly articulate students' transfer options and help them determine, as early as possible, their field of interest, major, and preferred transfer destination.

²⁰ http://www.sbctc.edu/resources/documents/colleges-staff/research-data/transfer-research/resh rpt 10 1 transfer non transfer students.pdf

- Continuously monitor student progress, provide frequent feedback, and intervene quickly when students are off-track.
- Help students access the financial resources necessary to achieve their goals

Four-year college advising practices should

- Commit dedicated personnel, structures, and resources for transfer students.
- Assign advisors and clearly communicate essential information to prospective transfer students.
- Strongly encourage transfer students to choose a major prior to transfer.
- Replicate elements of the first-year experience for transfer students.
- Exercise fairness in financial aid allocation.

The Transfer Playbook also identifies four emerging practices, described as "the next frontier":

- Improve bachelor's degree outcomes for high school "dual enrollment" (in Oregon, "accelerated learning") students.
- Define transfer requirements in terms of competencies.
- Monitor student progress across the entire pathway.
- Connect transfer pathways to regional labor market needs.

Strategies for institutional implementation, at both community colleges and four-year institutions, are included. Though details vary by sector, general strategic principles are consistent:

- Collect data on transfer student supports and outcomes.
- Build an internal coalition for improvement.
- Build on-going relationships with transfer destination partners/ feeder community colleges
- Create a vision and plan for improvement.

Finally, the Transfer Playbook synthesizes practitioner perspectives on benefits and challenges associated with state transfer articulation policies. The benefits identified include statewide articulation agreements' ability to discourage self-serving requirements, promote consistency, and encourage mutual understanding and consensus on student learning expectations.

Potential pitfalls of statewide agreements are also observed:

- General education agreements are insufficient: Encouraging students to focus on completing general
 education requirements, without paying attention to major requirements, may limit students' options
 rather than expand them. Common features of general education requirements typically provide no
 specification of which courses can satisfy requirements for particular majors—a notable problem for
 majors in fields with specific, or heavy, lower-division math and science requirements.
- Some statewide major-specific articulation agreements are too specific: Four-year institutions' major
 prerequisites may vary; universities forced to adopt a singular model may find other ways to ensure
 degree requirements are met, resulting in greater confusion for students. Washington's transfer
 degrees (discussed in the SBCTC Reports) are highlighted in the Transfer Playbook as a promising
 approach.
- Institution- and major-specific program maps are still necessary: State level articulation agreements lack the specificity necessary to truly guide students; they tend to be fairly static, while program maps could be updated annually. Students should have available and be encouraged to refer to program

- maps rather than articulation agreements for current, accurate, and relevant information to plan their transfer course of study.
- Involving advisors in the process is critical: To generate common vision and buy-in, faculty and academic administrators recommend advisors be included in statewide articulation agreement development, as they have a unique perspective on student needs and long-term goals.

