

Data & Technology Insight
Webinar: What We Know About
Transfer Outcomes and How
Colleges Can Improve Them
December 5, 2017

Who is Joining us Today



Vice President of
Data, Technology, and
Analytics
Achieving the Dream



Associate Director of Data, Technology, and Analytics Achieving the Dream

Allison Ray Akalonu



ATD Data Coach and Senior Research Scholar Community College Research Center

Davis Jenkins

Agenda

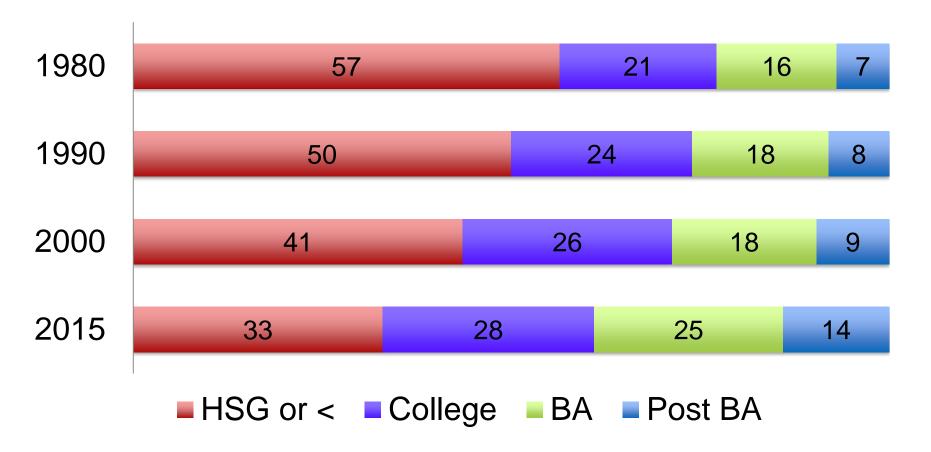
- ATD's Data & Technology Insight Webinar Series
- Tackling Transfer: What We Know About Transfer Outcomes and How Colleges Can Improve Them
- Q&A and Discussion

Data & Technology Insight Webinar Series

- The Ethical Use of Predictive Analytics in Higher Education
 - February 7, 2018 from 2:00-3:00 PM EST / Register here

- ATD's YouTube Channel
 - Watch former webinars <u>here</u>

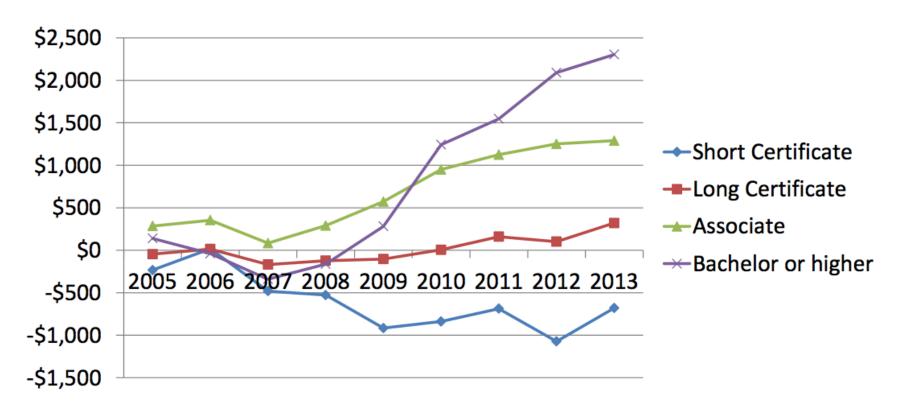
Workforce Increasingly Educated



Source: Valletta (2015)

Returns over Time - Female

(2004 VCCS Cohort; quarterly wage earnings 2005-2013)

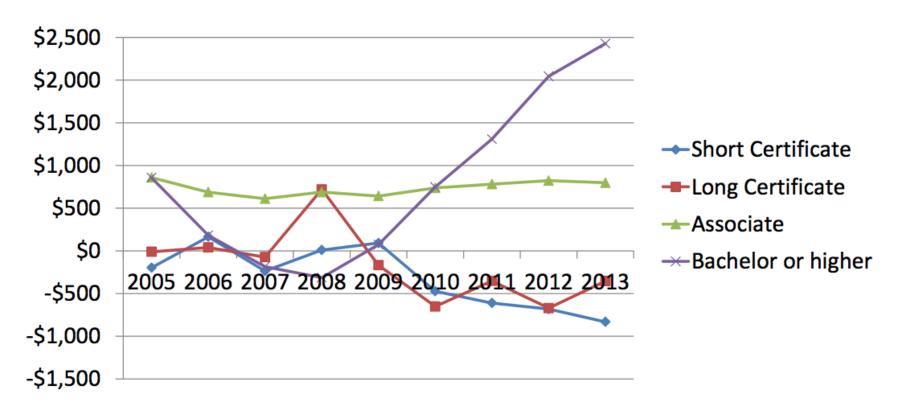


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Source: Xu, Jaggars, & Fletcher, 2016.

Returns over Time - Male

(2004 VCCS Cohort; quarterly wage earnings 2005-2013)



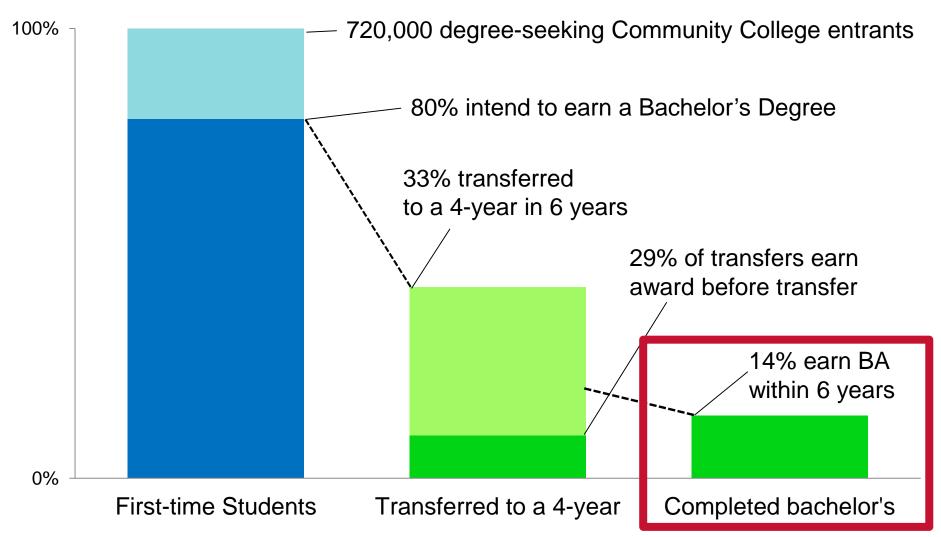
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Source: Xu, Jaggars, & Fletcher, 2016.

The vast majority of students who enroll in a community college plan to one day earn a bachelor's degree.

Most never make it.

Few Transfer, Even Fewer Complete

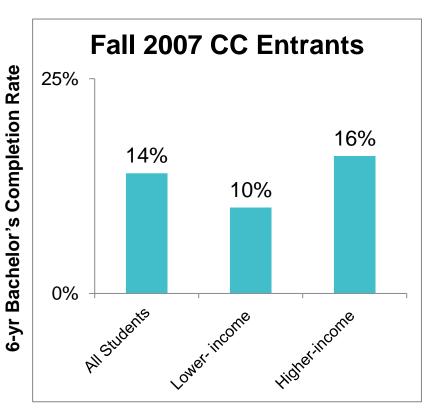


Source: Jenkins & Fink (2016)

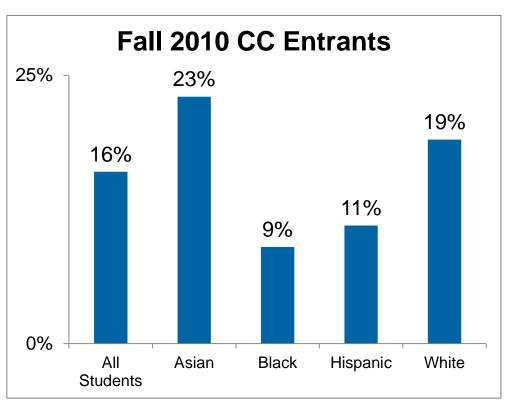




Achievement gaps, by Race & Income



Jenkins & Fink, 2016



Shapiro et al., 2017

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January 2016

NATIONAL STUDENT CLEARINGHO RESEARCH CENTE

The research reported here was supported by the Inst through Grant R305C110011 to Teachers College, C authors and do not represent views of the Institute or Community College Research Center who helped us

For information about authors and CAPSEE, visit ca

Google

A Longitudinal Analysis of Community College Pathways to Computer Science Bachelor's Degrees

2016





Barriers to Transfer Success

- 1) Transfer paths unclear
- 2) Inadequate advising and planning
- 3) Lack of early momentum
- 4) Students make progress, don't transfer
- 5) Credit loss

Transfer Success Barriers:

1. Transfer Paths Unclear

WEBSITE EXERCISE

Imagine you are a student about to register for classes at your community college.

You want to study marketing and transfer to a local four-year university. Go to **YOUR COLLEGE'S** website, and find the information that you need to select your courses and transfer successfully. Try to figure out what courses you will need to in order to transfer and enter the marketing program at the four-year institution.

Think about the following questions AS THE STUDENT:



Getting Off on the Right Start: What marketing programs are available at nearby universities? What career options are available to you after you transfer and complete the degree? What do salaries look like for these career options? Is this information available to you on either website?

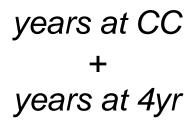


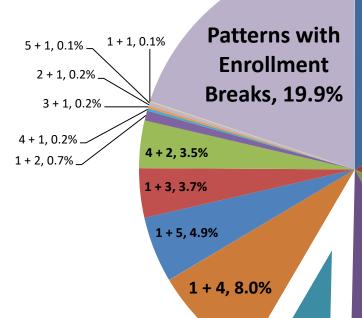
Planning for Program Requirements: What are the requirements for admission to the university's marketing programs? What classes will the student need to take at **YOUR COLLEGE** if you want to transfer into a marketing program at the university? How easy or difficult was it to find this information? How many clicks did it take?

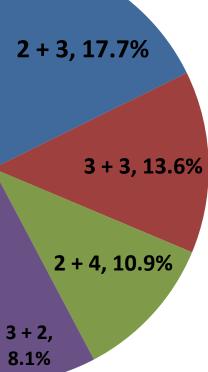


Locating In-Person Help: Who would you need to go at **YOUR COLLEGE** to get information on transfer in marketing? Where would you go to on your campus to find that person? How easy or difficult was it to find this information on your website?

Enrollment Patterns among ~100K Bachelor's Degree Completers from the Fall 2007 Entering CC Cohort







Few graduates follow 2+2 pattern

2 + 2, 8.1%

Transfer Success Barriers:

2. Inadequate advising and planning

Community College Pathways to Computer Science Bachelor's Degrees

2016



1.8M community college students tracked 2007-2014



- **321** enrolled community college students surveyed
 - 24 enrolled community college students interviewed
 - 14 past community college students interviewed

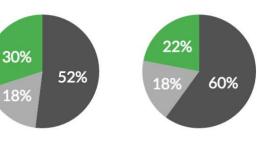
Not representative of the greater community college population





51% male

3,290 who earned CS bachelor's





- middle neighborhood SES guintile
- top two neighborhood SES quintiles



87% male

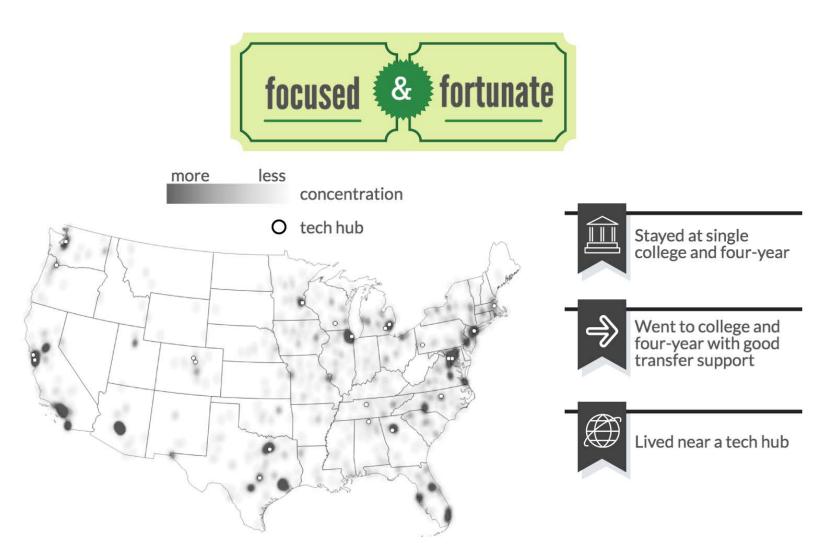
NO DEFINED PATHWAY

to CS bachelor's degrees



unique pathways among 3,290 CS degree earners

Community college students who earned computer science bachelor's degrees:



Barriers include...

- Confusing transfer requirements and pathway
- Personal and financial responsibilities on top of inflexible requirements and limited course capacity
- Low confidence and anxiety about math requirements
- Limited understanding of how CS is applied in professional settings

Recommendations: Take advantage of the potential pool already at community colleges



Strengthen pathways and align requirements between two- and fouryear institutions



Support diverse students with institutional flexibility and targeted programs



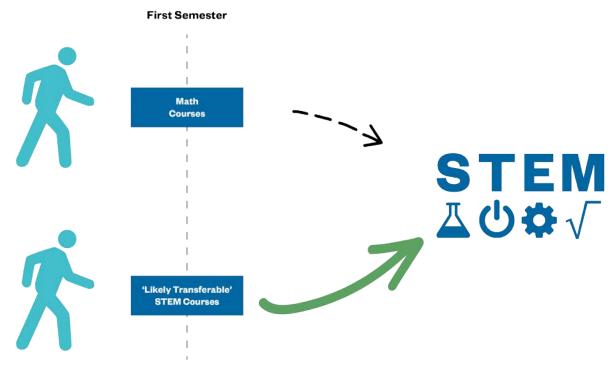
Be more inclusive and proactively recruit students into CS



Incorporate career relevant course content

STEM Transfer Pathways

Students who successfully transferred in STEM more frequently took STEM transfer courses before transfer math courses — suggesting that it is helpful for students to get a 'taste' of STEM to keep them interested as they work through the math courses.

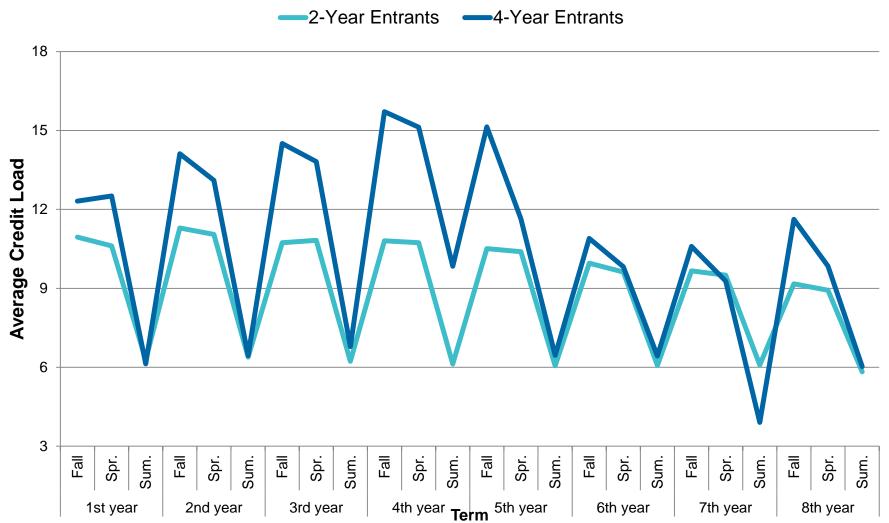


Source: Wang, X. Res High Educ (2016) 57: 544. https://doi.org/10.1007/s11162-015-9397-4

Transfer Success Barriers:

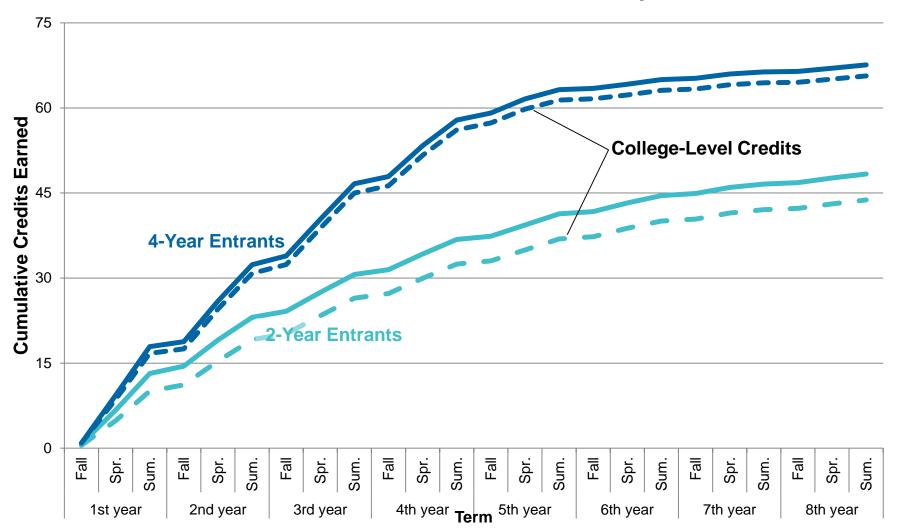
3. Lack of Early Momentum

VA Fall 2004 Matched 2- and 4-Year FTIC Students Average Credit Load by Term



Source: Xu, Jaggars, & Fletcher, 2016.

VA Fall 2004 Matched 2- and 4-Year FTIC Students Cumulative Credits Earned by Term

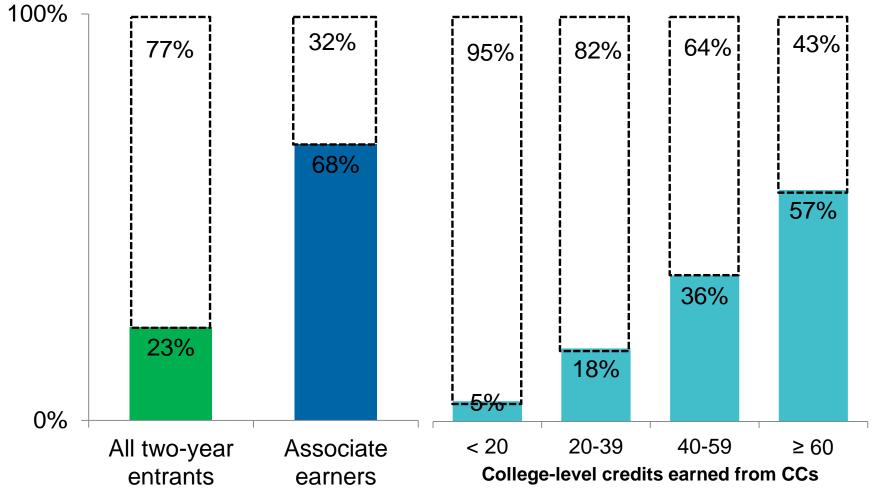


Source: Xu, Jaggars, & Fletcher, 2016.

Transfer Success Barriers:

4. Students Make Progress, Don't Transfer

VA Fall Starting 2004 CC Cohort, Bachelor's Degree Seekers Rate of Transfer to Four-year Colleges



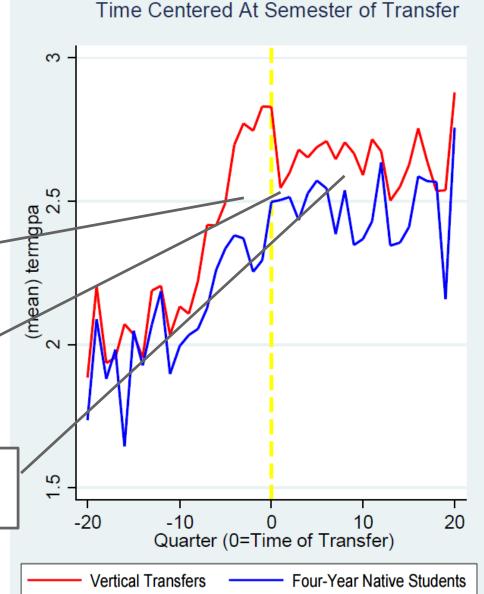
Source: Xu, Jaggars, & Fletcher, 2016, Table 9.



Transfer student community college GPAs pre-transfer much higher than matched sample of 4-Year Entrants

"Transfer Shock" initial drop in GPA; still higher than matched sample of 4-Year Entrants

Transfer Student GPA consistently higher than matched sample of 4-Year Entrants

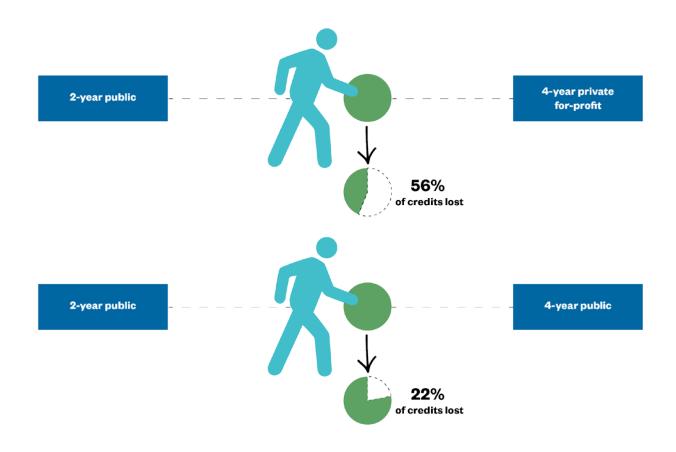


Source: Xu, Jaggars, & Fletcher, 2016, Figure 4.

Transfer Success Barriers:

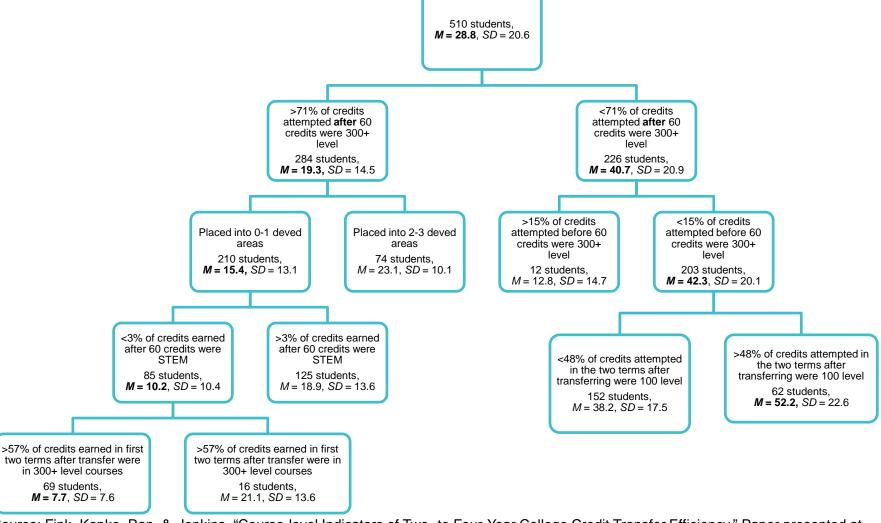
5. Credit Loss

Estimated Percentage of Credits Lost in Transfer, on Average, by Transfer Path, Academic Years 2003-04 to 2008-09



Simplified Partition Tree:

State A, 2-year Entrants, Excess Credits Attempted



Source: Fink, Kopko, Ran, & Jenkins. "Course-level Indicators of Two- to Four-Year College Credit Transfer Efficiency," Paper presented at APPAM 2016, Washington, DC.

GENERAL EDUCATION REQUIREMENTS

(Select 12 courses from this list of more than 300)

Basic Liberal Studies Requirements: [2 courses must include the Diversity (D) overlay]

English Communication: 6 credits; 3 credits must be in a writing course

Writing (ECw): ELS 112, 122 (nonnative speakers); HPR 326; WRT 104, 105, 106, 201, 227, 235, 302, 303, 304(D), 305(D), 333.
General (EC): COM 100(D), 110(D); LIB 120; PHL 101.

Fine Arts and Literature (A): 6 credits; 3 credits in Fine Arts and 3 credits in Literature

Fine Arts: ARH 120(D), 251(D), 252(D); ART 101, 207; FLM 101(D), 203(D), 204(D), 205(D); HPR 105, 124, 201A, 202A, 324; LAR 201; MUS 101(D), 106(D), 111, 292(D), 293(D); PLS 233; SPA 320(D); THE 100, 181, 351(D), 352(D), 381, 382, 383.

Literature: AAF 247(D), 248(D); CLA 391(D), 395(D), 396(D), 397(D); CLS 160(D); ENG 110(D), 160(D), 241(D), 242(D), 247(D), 248(D), 251(D), 252(D), 260(D), 262(D), 263(D), 264(D), 265(D), 280(D), 300(D), 302(D), 303(D), 304(D), 317(D), 355(D), 357(D), 358(D); FRN 309(D), 310(D), 320(D), 391(D), 392(D), 393(D); HPR 105, 125, 201A, 202A; RUS 391(D), 392(D); SPA

Language/Culture (FC): 6 credits

305(D), 306(D), 307(D), 308(D); WMS 317(D).

- Demonstration of competence through the intermediate level by examination or successfully completing through 104 (living language) or 302 (classical language)
- Two-course sequence (or one course at the 113 level) in a previously studied language through at the appropriate level (all D):
 ARB 103, 104; CHN 103, 104; FRN 103, 104; GER 103, 104; GRK 301, 302; HBW 103, 104; ITL 103, 104, 111; JPN 103, 104;
 LAN 193, 194; LAT 301, 302; POR 103, 104; RUS 103, 104; SPA 103, 104, 111, 113, 210.
- Two-course sequence (or one course at the 111 level) in a language not previously studied (or studied for less than two years in high school) through the beginning level: ARB 101, 102; CHN 101, 102; FRN 101, 102; GER 101, 102; GRK 101, 102; HBW 101, 102; TTL 101, 102; JPN 101, 102; LAN 191, 192; LAT 101, 102; POR 101, 102; RUS 101, 102; SPA 101, 102.
- Study abroad in an approved program for one semester
- Major in a foreign language
- Formerly registered international students, students with recognized immigrant status, or naturalized citizens (at Dean's discretion)
- Two courses in Cross-Cultural Competence: CPL 300(D); FRN 309(D), 310(D), 320(D), 391(D), 392(D), 393(D); HIS 132(D), 171(D), 172(D), 180(D), 311(D), 327(D), 374(D), 375(D); HPR 201F, 202F; LET 151L(D), 151Q(D), 151R; NRS 300; PHL 331(D); RLS 131(D); SPA 320(D), TMD 224(D); six credits of a full-semester approved Intercultural Internship in a foreign country through the Office of Internships and Experiential Education

Letters(L): 6 credits

AAF 150(D), 201(D), 355(D), 356(D); APG 327; BGS 392(D); CLS 160(D), 235; EGR 316(D); ENG 110(D), 160(D), 243(D), 251(D), 252(D), 280(D), 355(D), 355(D), 356(D); FRN 391(D), 392(D), 393(D); HIS 111, 112, 113(D), 114(D), 116, 117, 118(D), 130(D), 132(D), 141(D), 142(D), 145(D), 146(D), 150(D), 160(D), 171(D), 172(D), 180(D), 304, 305, 310(D), 311(D), 314, 323(D), 327(D), 332(D), 333(D), 340(D), 341(D), 346(D), 351(D), 355(D), 356(D), 374(D), 375(D); HPR 107, 201L, 202L, 307; JOR 110(D); LAR 202(D); LET 151L(D), 151Q(D), 151R(D); NUR 360(D); PHL 101, 103, 204, 210(D), 212(D), 215, 217(D), 235, 314, 316(D), 321, 322, 323(D), 325(D), 338(D), 331(D), 346, 355; PSC 341, 342; PSY 310; RLS 111(D), 125, 126, 131(D); WMS 220(D), 315(D), 320(D)

Mathematics(MQ): 3 credits satisfied by MTH 141

BUS 111, CSC 101, 201; HPR 108, 201M, 202M; MTH 106, 107, 108, 109, 111, 131, 141; PSC 109; STA 220.

Natural Sciences(N): 6 credits; satisfied by PHY

AFS 190, 210, 211; APG 201(D); AST 108, 118; AVS 101(D); BCH 190; BIO 101, 102, 105, 106, 286(D); BPS 201; CHM 100, 101, 103, 112; GEO 100, 102, 103, 110, 113, 120; HPR 109, 201N, 202N; MIC 190; NFS 207; NRS 190; OCG 110, 123, 131; PHY 109, 111, 112, 140, 185, 186, 203, 204, 205, 273, 274, 275; PLS 150, 190; TMD 113

Social Sciences(S): 6 credits

APG 200(D), 202, 203(D), 301(D); CPL 202(D); ECN 100(D), 201, 202, 306, 381(D); EDC 102(D); EEC 105, 310, 356; GEG 101(D), 104(D), 202(D); HDF 225; HPR 110(D), 201S, 202S; HSS 130; JOR 110(D); KIN 123(D); LIN 200(D); MAF 100; NUR 150(D); PSC 113(D), 116(D), 274(D), 288; PSY 103(D), 113(D), 232(D), 235(D), 254(D), 255(D); SOC 100(D), 212(D), 230(D), 240(D), 242(D), 274(D); TMD 224(D), WMS 150(D)

HOW STUDENTS EXPERIENCE TRANSFER







THE TRANSFER PLAYBOOK:

ESSENTIAL PRACTICES FOR TWO- AND FOUR-YEAR COLLEGES









The Transfer Playbook: Essential Practices for Two- and Four-Year Colleges*

State	Community College	Universities
Colorado	 Front Range CC 	Colorado State University
Connecticut	Manchester CC	Eastern Connecticut State U
Florida	Broward College	Florida International UFlorida Atlantic U
Louisiana	LSU-Eunice	U of Louisiana - Lafayette
Mass.	Holyoke CC	U Mass Amherst
Washington	• Everett CC	University of WashingtonWestern Washington U

^{*} Wyner, Deane, Jenkins & Fink, May 2016.





Essential 2- and 4-Year College Transfer Practices

- 1. Prioritize transfer student success
- 2. Create clear program pathways with aligned high quality instruction
- 3. Provide tailored transfer student advising



DRAFT FOR FIELD TESTING AND REVIEW COMMENTS WELCOME





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Overview: This tool is design Essential Practices for Two-Research Center at Columbia have achieved exceptional tr characteristics).

How to use this tool: The ass
3) provide tailored transfer a
systematically each sub-prac
and that it is part of the
space to identify possible ne

(1) Minima (2) Beginn (3) Buildin (4) System

We recommend that a core that serve transfer students. student services deans or dir should then engage others a of faculty and staff. Ideally the transfer students, and motive

For help using this tool: Cont

To share feedback or comments of

THE TRANSFER PLAYBOOK:
TOOL FOR ASSESSING PROGRESS TOWARD ADOPTION OF
ESSENTIAL TRANSFER PRACTICES FOR FOUR-YEAR COLLEGES

Institution Name:	Date:

Overview: This tool is designed to help your institution assess the alignment of your community college transfer student practices with those described in The Transfer Playbook: Essential Practices for Two- and Four-Year Colleges, published in May 2016 by the Aspen Institute's College Excellence Program and the Community College Research Center at Columbia University's Teachers College. These practices were identified based on research on two- and four-year institutional partnerships that have achieved exceptional transfer and baccalaureate completion rates for students who start at community colleges (controlling for student and institutional characteristics).

How to use this tool: The assessment is organized around four categories of essential practices: 1) prioritize transfer, 2) create clear, rigorous program pathways, 3) provide tailored transfer advising, and 4) build effective transfer partnerships. Within the four categories, please use the following scale to rate how systematically each sub-practice is implemented at your college. By "systemic," we mean that the practice is implemented routinely and at scale, and that it is part of the regular operation and culture of the college. The tool offers questions to consider as you conduct the assessment, and space to identify possible next steps.

Scale of Adoption	Definition	
(1) Minimal	The college does not engage in this practice in a significant way (i.e., routinely and/or at scale)	
(2) Beginning	eginning The college is beginning to engage in this practice, but has not moved toward systematizing it	
(3) Building The college engages in this practice and is moving toward systemic implementation		
(4) Systemic	The college engages in this practice systemically	

We recommend that a core team be assembled to complete the assessment to ensure that those with relevant knowledge of transfer student practices and policies are included. Possible members of the team might include: deans from at least two colleges or academic divisions, department chairs from at least two academic divisions, a financial aid staff member, and advisors who work with transfer students. Once a diverse, inclusive core team has completed the assessment, members should then engage others at the institution in conversation about the results, beginning with the president and her/his cabinet and followed by a broader group of faculty and staff. Ideally these discussions should help refine the assessment, build shared understanding of the ways your institution does and does not support transfer students, and motivate college leaders to continue to engage the wider college community in planning and implementing improvements.

For help using this tool: Contact Josh Wyner of the Aspen Institute (josh.wyner@aspeninstitute.org) or Davis Jenkins at CCRC (davisjenkins@gmail.com).

To share feedback or comments on the report, please contact John Fink (john.fink@tc.columbia.edu).

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THE ASPEN INSTITUTE

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To share for

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outcomes is institution's b. Transfer stu reflected as institution's (e.g., strate; self-study, s planning do plans, etc.). c. The instituti and widely of transfer stu the effective practices.	b. Community college coursework and extra-curricular activities provide students with rigorous preparation aligned to	Minimal Do the transfer maps clearly indicate: Case mmended lower-division courses, course sequences, and progress milestones by academic term for specific majors? Ogleat information on special requirements and procedures for specific majors or colleges? Ogleat information on special requirements and procedures for specific majors or colleges? Ogleat information on special requirements and procedures for specific majors or colleges? Ogleat information on special requirements and procedures for specific majors or colleges? Ogleat information on special requirements and procedures for specific majors or colleges? Ogleat information on special requirements and procedures for specific majors or colleges? Ogleat information on special requirements and procedures for specific majors? Ogleat information on special requirements and procedures for specific majors? Ogleat information on special requirements and procedures for specific majors? Ogleat information on special requirements and procedures for specific majors? Ogleat information on special requirements to be and procedures for specific majors? Ogleat information on special requirements and procedures for specific majors? Ogleat information on special requirements and procedures for specific majors? Ogleat information on special requirements and procedures for specific majors? Ogleat information on special requirements and procedures for specific majors? Ogleat information on special requirements and procedures for specific majors? Ogleat information on special requirements and procedures for specific majors? Ogleat information on special requirements and procedures for specific majors? Ogleat information on special requirements and procedures for specific majors? Ogleat information on special requirements and procedures for specific majors? Ogleat information on special requirements and procedures for specific majors? Ogleat information on special requirements and procedures for specific majors? Ogleat information of specific majors and				
	transfer pathways have been developed for circumstances where those are not the best	For which students or programs do 2+2 arrangements work best? For which does the 2+2 arrangement work least well? What new structures have been put in place to improve outcomes (e.g., 1+3; 3+1; reverse transfer)? Systemic				

To share feedback

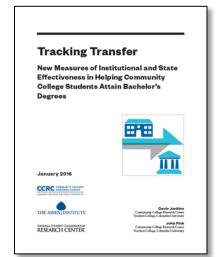
Tracking Transfer: Five New Measures



- 1. Transfer-Out Rate
- 2. Transfer-with-Award Rate
- 3. Transfer-Out Bachelor's Completion Rate



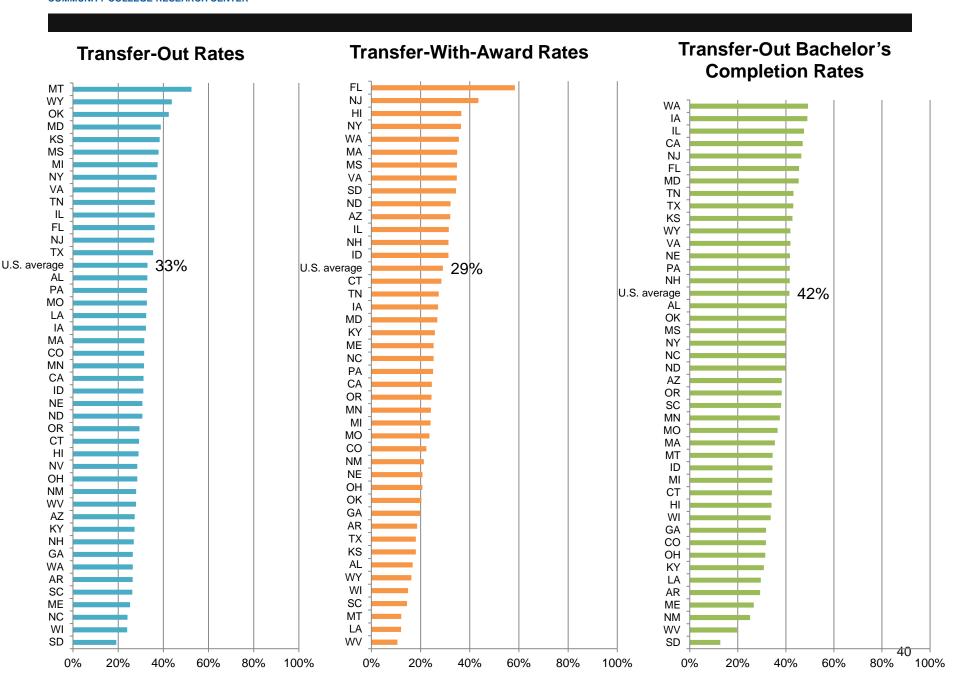
5. Community College Cohort Bachelor's Completion Rate

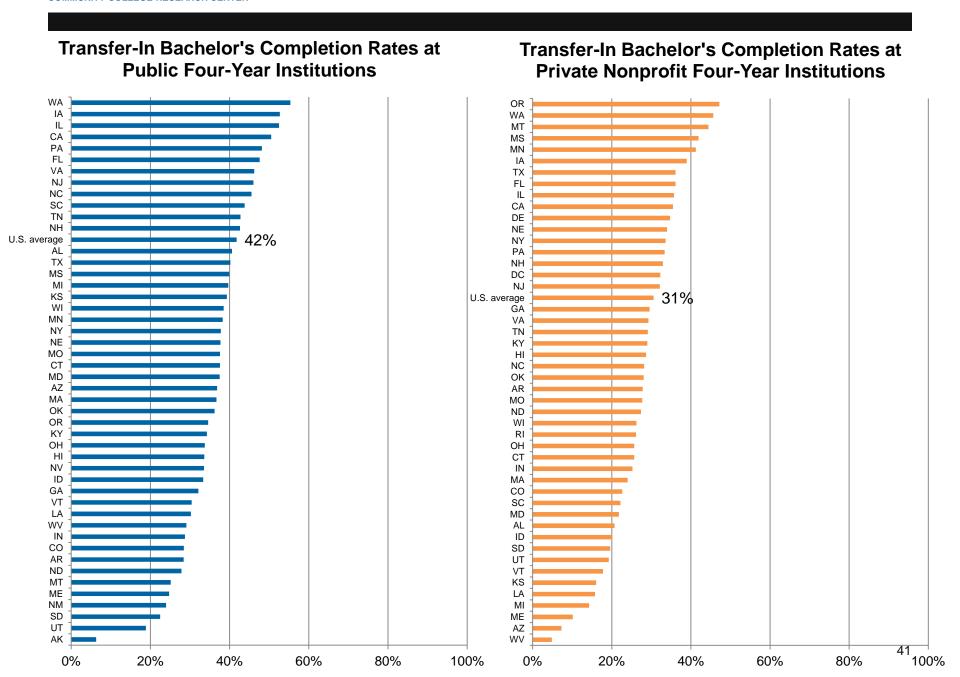


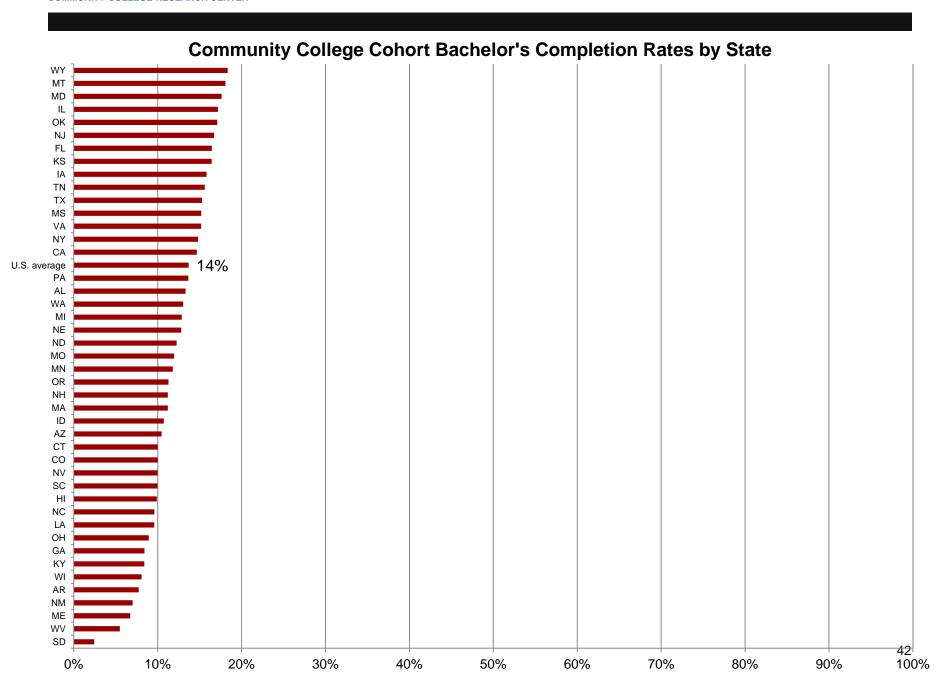
4. Transfer-In Bachelor's Completion Rate

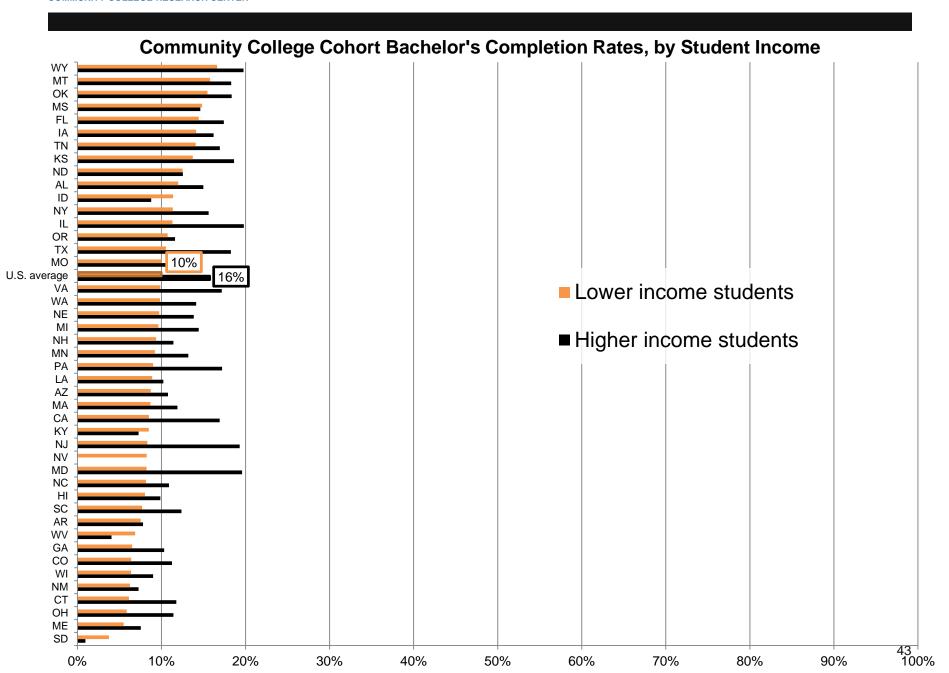


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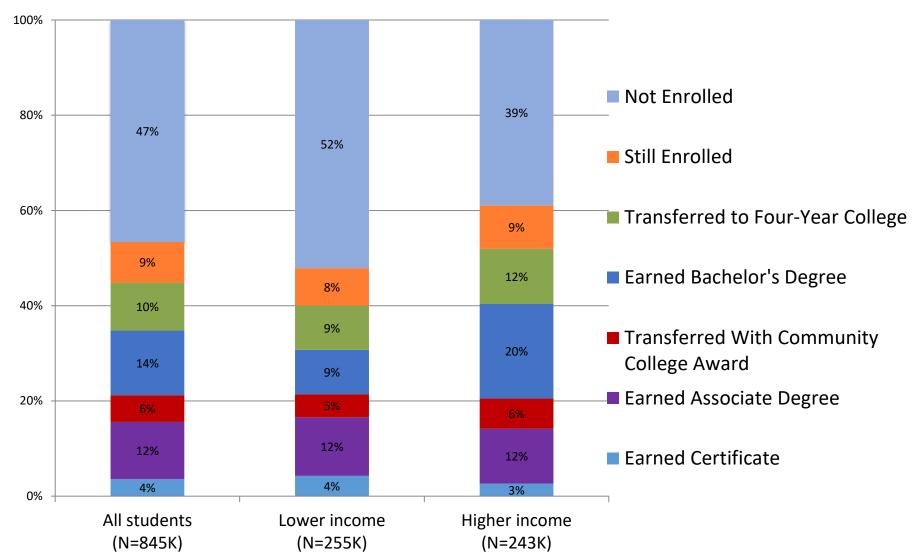






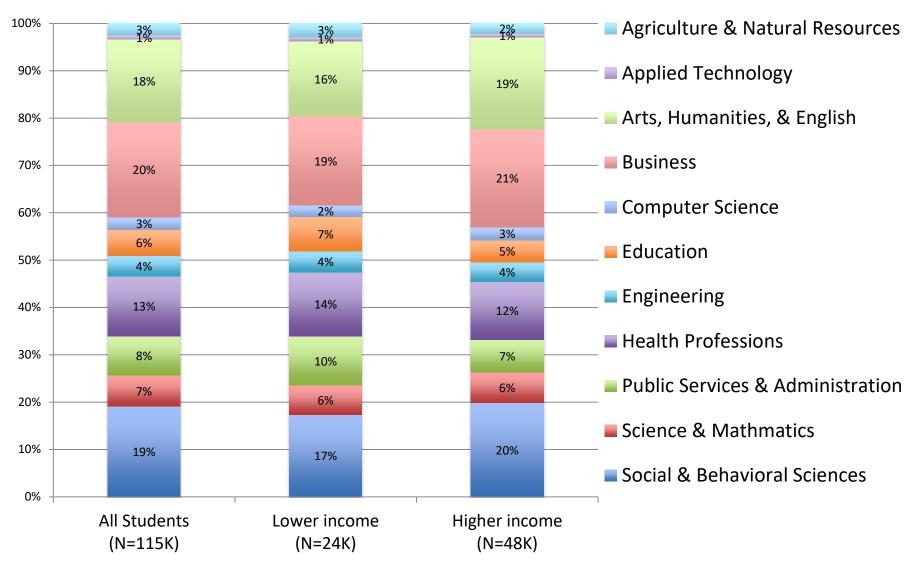


Highest Outcomes in Six Years by Income Among FTEIC Degree-Seeking Community College Students (Excluding Dual Enrollment Students)



Source: CCRC analysis of NSC data on the fall 2010 FTEIC, degree-seeking community college cohort.

Bachelor's Degree Completer Program Areas, FTEIC Community College Entrants (Fall 2010 FTEIC Cohort), By Student Income



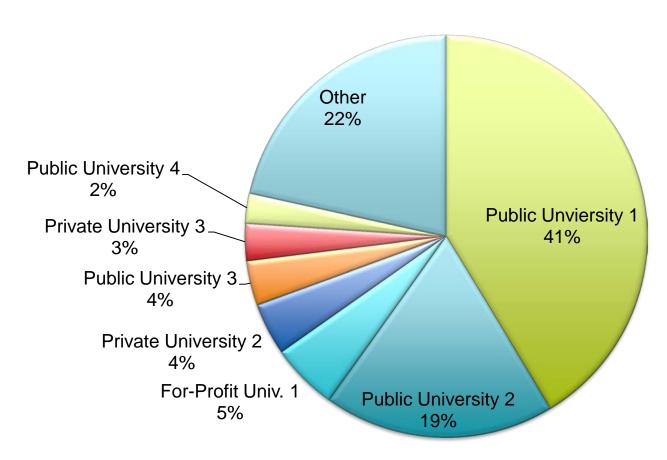
Source: CCRC analysis of NSC data on the fall 2010 FTEIC, degree-seeking community college cohort.

Useful NSC Transfer Analyses

- Transfer destinations
- ☐ Transfer destination BA grad rates
- Transfer bachelor's degree types
- Transfer bachelor's degree majors
- Credential stacking

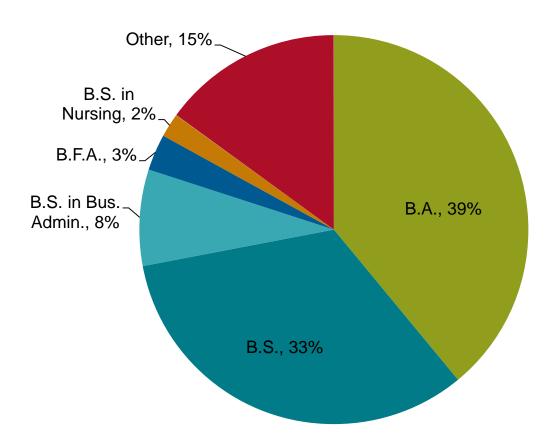
Transfer Destinations

2005-06 FTIC CC Cohort 6-Year Transfer Destinations



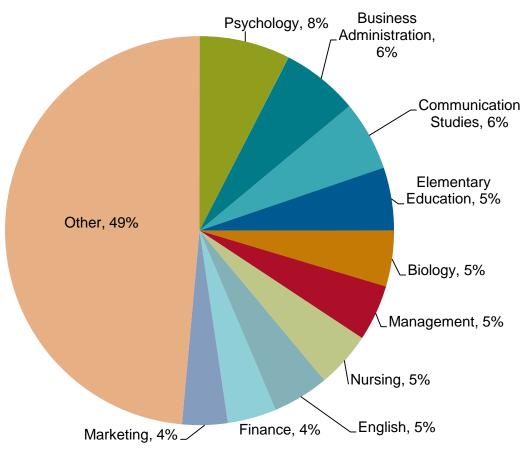
Transfer Bachelor's Degrees

2005-06 FTIC CC Transfer Students Bachelor's Earners by Award Type



Transfer Bachelor's Majors

2005-06 FTIC CC Transfers Bachelor's Earners by Program











CCR

Table 2. Transfer-out Rates

Table 6. #1 Transfer Partner: Name withheld (sample report)

	All	Lower-	Higher-	Age:	Age:	Age:
	Students	income	income	18-20	21-24	25+
Number of transfer students to this FY	148	7	96	121	12	15
Pct. of transfers who earned a pre-transfer CC award	51%	++	48%	50%	42%	73%
Average number of years before transfer to this four-year institution	2.7	+	2.6	2.6	2.7	3.0
Bachelor's degree completion rate for students who transferred to this four-year institution	66%	+	63%	65%	75%	67%
Average time to bachelor's degree completion (within 6 years)	4.7	++	4.7	4.7	4.6	4.9

Further Detail on Broad Degree Fields among Transfer Students who Completed Bachelor's Degrees

	Percentage
Business	10%
Health Professions	2%
Arts, Humanities, & English	19%
Social & Behavioral Sciences	20%
Science & Mathematics	16%
Agriculture & Natural Resources	4%
Computer & Information Sciences	12%
Education	2%
Engineering	13%
Applied Technology	0%
Public Services & Administration	0%
All bachelor's degree completers in this partnership $(N = 98)$	100%

⁺⁺ Fields with fewer than 10 students in the denominator are withheld from reporting

Note. Student age is recorded upon their first enrollment at the community college in the fall of 2010. Categories may not add up to 100% as this taxonomy excludes 0.2% of the bachelor's degree earners nationally who earned a degree in some culinary, mortuary, multidisciplinary, and leisure/recreation fields. A detailed description of the CIP codes included in each broad area is available upon request.

ed						
nations						
	Pct. of CC's					
	bachelor's					
of CC's	degree					
ers who	graduates who					
erred to	completed at					
s FY	this FY					
5%	37%					
2%	15%					
2%	12%					
9%	10%					
5%	4%					
2%	3%					
2%	0%					
1%	0%					
1%	2%					
1%	1%					
0%	16%					
00%	100%					

ore restrictive transfer







Ask Ourselves: Community Colleges

- Why don't more students transfer out?
- What incentives are there to complete the AA?
- Do we track transfer outcomes by program/major?
- How can we improve outcomes for low-income students? Students of color?
- How can we better help older seeking to transfer?
- What about our relationships with particular universities might explain partnership results?

Q&A and Discussion

For more information

Please visit us on the web at

http://ccrc.tc.columbia.edu

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