

From Transfer to Targeted Pathways:

Florida's efforts to get transfer students to the finish line



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Executive Summary

Established in 1971 as the nation's first legislatively mandated articulation policy, Florida's "2+2" transfer pathway represents a bold idea – to provide students access to a seamless path toward a bachelor's degree no matter where in the state a student lives. In the 2+2 articulation model a student spends two years at a state or community college, earns their associate's degree and transfers to a state university, with all 60 credits, to complete the last two years of a four-year degree. Florida's 2+2 articulation model has been replicated across the country and has received national attention and praise.

Florida's 2+2 transfer pathway is an essential mechanism for increasing postsecondary access and attainment, closing equity and opportunity gaps, and developing a highly skilled and educated workforce. In addition to serving, on average, an older, more diverse group of students, the state's 2+2 pipeline also tends to more often support students who graduate from low-income and rural schools. More than two-thirds of associate in arts (AA) degree earners from the Florida College System (FCS) enroll in either an FCS or state university bachelor's degree program within two years. Sixty-eight percent of associate's degree completers who transfer to the state universities complete a bachelor's degree in four years or less.

While the statewide 2+2 articulation policies set the foundation for statewide transfer, it is the strong partnerships between specific institutions that ensure its continued success. Over time, many of these partnerships, such as DirectConnect to UCF (University of Central Florida), FUSE at the University of South Florida, and Connect4Success at Florida International University have evolved to provide clear program pathways, campus supports and other resources that extend beyond the scope of the 2+2 agreements. These enhanced programs or targeted/guided pathways, in place at 10 of the 12 state universities and all 28 state colleges, are intended

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to enhance (not supplant) the current statewide articulation policies and hold promise to further improve Florida's 2+2 articulation system and increase student success.

This brief highlights ways Florida can continue to build on the success of its 2+2 system. To further improve student outcomes, the following recommendations are offered for consideration:

- Maintain a strong commitment to access and choice for students across the state in all enhancements to 2+2 articulation agreements
- Include a transfer student success metric in the State University System performance-based funding model
- Include the input of advisors and transfer students before implementing changes to advising resources and web-based tools
- Maintain bachelor's degree access at Florida College System institutions
- Provide system level data to help institutions further promote their transfer student initiatives
- Explore opportunities to leverage state financial aid to boost transfer student outcomes
- Advise students about transfer and articulation before they get to college

About Florida College Access Network

Florida College Access Network (FCAN) is Florida's first collaborative network committed to ensuring all Floridians have the opportunity to achieve an education beyond high school and prosper in Florida's dynamic economy. Our mission is to create and sustain a statewide network that catalyzes and supports communities to increase college and career preparation, access, and completion for all Florida students. Our vision for Florida is Goal 2025: For 60% of working-age Floridians to hold a high-quality postsecondary degree or credential by the year 2025.

As a nonpartisan organization, FCAN strives to expand knowledge of research, data, policies and practices that impact postsecondary access and attainment in Florida. This policy brief is intended as an educational resource and does not constitute an endorsement or opposition to any specific bill or legislation.

For more research and data from FCAN, visit www.floridacollegeaccess.org/research-and-data/.

FCAN is a statewide organization hosted by the University of South Florida System (USF). The statements and positions presented are those of FCAN and are not made on behalf of the USF Board of Trustees or intended to be in any way representative to USF.

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Introduction

There are many reasons why students choose to attend community colleges as their primary access point to postsecondary education. Community colleges offer an open-door admissions policy, low tuition, and in-demand workforce credentials as well as convenient locations and flexible course delivery mechanisms to suit a wide array of student needs.

Students also attend a community college as a starting point to earning a bachelor's degree. According to the Community College Research Center at Columbia University (CCRC), 80 percent of community college students intend to earn a bachelor's degree.¹ Because so many students rely on community colleges as their pathway toward a four-year degree, transfer is a core function of the sector.

Community colleges, or state colleges as they are referred to in Florida, are also a popular starting point for many bachelor's degree seekers in Florida.² Whether because of cost, admissions requirements and/or proximity to home, students attending a state college can do so while fulfilling their general education requirements and complete an associate in arts (AA) degree. In 2016-17, more than 325,000 students enrolled in Florida state colleges to complete an AA degree, more than any other program offered by these institutions.³ FCS institutions are also the most popular postsecondary choice for high school students, representing approximately 63 percent of all college enrollments after graduation.⁴

To provide these students with a seamless path toward their bachelor's degree, Florida has developed a set of transfer policies and other mechanisms to help facilitate this process. Florida calls this transfer pathway "2+2": spend two years at a state college and two years at a state university to get a four-year degree.⁵ The Florida "2+2" pathway has been in existence for decades and remains one of the state's primary tools for developing a highly-skilled and educated workforce.

Florida's 2+2 articulation model has been replicated across the country and has received national attention and praise. Florida was named "Number One State for Higher Education" by *U.S. News & World Report* and was the only state in the nation given an "A" grade for both two-year and four-year public postsecondary student access and success by the U.S. Chamber of Commerce.⁶ Florida is also one of only seven states recognized by the Aspen Institute and Community College Research Center (CCRC) for being above the national average in both transferring students from community colleges to four-year schools and in bachelor's degree attainment for such students.⁷

While the recognition of Florida's 2+2 program is well-deserved, there is still room for improvement. Both in Florida and nationally, researchers and policymakers are calling for policies to strengthen transfer

Florida's public postsecondary system is comprised of 12 public universities, 28 state and community colleges and 49 technical colleges/centers.

programs.⁸ Recent national reports from National Student Clearinghouse, the United States Government Accountability Office (GAO), and the aforementioned CCRC, among others, discuss the need to improve graduation and transfer rates, decrease excess credit hours and increase the number of students who ultimately finish their bachelor's degrees.⁹ In Florida, the State University System of Florida Board of Governors has recognized the need to review and refine the transfer system by establishing the Select Committee on 2+2 Articulation. And for the 2018 legislative session, Florida lawmakers have introduced a bill to strengthen 2+2 articulation among state colleges and universities.¹⁰

With more than 50,000 students graduating with their associate's degrees from the Florida College System's 28 institutions each year, increasing outcomes for transfer students is one of the more impactful approaches the state can take to improve postsecondary attainment in Florida. The purpose of this brief is to highlight ways Florida can build on the success of its 2+2 system by highlighting best practices and identifying opportunities for improvement.

Why Florida's model works

Established in 1971 as the nation's first legislatively mandated articulation policy, Florida's 2+2 system represented a bold idea -- a seamless, student-centered, K-20 public system of education that provides its residents with the access and choices that make earning a 4-year degree possible no matter where in the state a student lives.¹¹ In addition to the robust transfer options students have among Florida's public postsecondary institutions, agreements are also in place which include the 30 non-profit Independent Colleges and Universities of Florida (ICUF) and a number of for-profit institutions.¹²

Florida's 2+2 transfer model guarantees admission to a public university for any student who completes an associate in arts (AA) degree at one of the state's 28 open-access Florida College System institutions.

The collection of policies that help facilitate this process, which started with common course numbering in the late 1960s, has evolved over the decades. The policies were initially put in place, in large part, to accommodate rapid expansion in Florida's higher education landscape around that time. Only four of today's twelve state universities

existed before 1960. Five were established between 1960 and 1965 to address Florida's rapidly-growing population and the coming of age of the Baby Boomer generation. Because the enrollment of freshmen and sophomores to these young universities was severely limited, students' primary access point to earning a bachelor's degree was the Florida College System, formerly the Florida Community College System.¹³ To bridge the 2-year and 4-year higher education systems and help realize the greater vision for seamless transfer, Florida became the first state to legislatively mandate a statewide articulation policy in 1971.¹⁴

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Below are some of the elements of these policies that have proven effective in Florida, many of which have been replicated by other states:¹⁵

Table 1: Selected 2+2 Articulation Policies in Florida

Policy	Description
Statewide Common Course Numbering System ¹⁶	Provides an inventory of postsecondary courses offered by public and participating non-public postsecondary institutions and facilitates the transfer of these credits among participating institutions using the same course prefix and number (ex. ENC 1101: First Year Composition).
Guaranteed admission to a state university ¹⁷	Students who complete an associate in arts (AA) degree at a Florida College System institution are guaranteed admission to a state university, along with their general education requirements and 60 credits earned. Students are not guaranteed admission into their university or program of choice as a part of this policy. ¹⁸
Common prerequisites ¹⁹	A centralized compilation of program prerequisites of bachelor’s degree programs at state 2-year and 4-year institutions to provide students and advisors with the information needed for transfer between institutions.
Acceptance of acceleration credits ²⁰	Requires all public postsecondary institutions to accept accelerated credit if equivalent course is offered. Includes dual enrollment, Advanced Placement (AP), International Baccalaureate Diploma Program (IB), College-level Examination Program (CLEP) and Advanced International Certificate of Education (AICE). ²¹
Articulation Coordinating Committee (ACC) ²²	Comprised of representatives from all levels of public and private education, the ACC oversees implementation of the statewide articulation agreements and recommends policy changes to the Higher Education Coordinating Council, State Board of Education and Board of Governors.

Although these policies provide the foundation for the articulation system, ensuring its success relies on a number of formal and informal maintenance efforts that exist throughout the state. As Florida Board of Governors past Chairman Thomas Kuntz has noted, “Florida’s vaunted 2+2 articulation system is a national model of which we can be proud – but it is not a system that is built and then runs on auto-pilot.”²³ The Articulation Coordinating Committee, Florida Department of Education’s Office of Articulation and the Florida Higher Education Coordinating Council each help to advise and recommend policies to enhance the progression of transfer students to their degree at the state level. A considerable number of institutional-level partnerships throughout the state implement the articulation policies, align curricula and provide supports to students that make articulation successful. These partnerships, and the maintenance efforts referenced above, ensure that alignment with articulation policies is maintained as degree and program requirements change over time.

Who are Florida's 2+2 students?

For many reasons, the “traditional” college student who enrolls full-time in a bachelor’s degree program at a university straight after high school no longer represents the majority of today’s students. According to national estimates, up to three-fourths of today’s college students are age 24 or older, juggle some combination of family obligations and work responsibilities, or enroll in coursework part-time.²⁴

These are the students who tend to benefit the most from the state’s 2+2 transfer model. For example, the average age of Florida College System transfer students who complete their associate’s degree and enroll at a state university is 25.8.²⁵ In contrast, the average age of non-transfer, or first-time-in-college (FTIC) state university students is 20.1. Transfer students also tend to take fewer credits than their FTIC state university peers (8.7 semester credit hours vs. 10.3), which suggests transfer students are more likely to juggle family, work and life responsibilities outside college. And though transfer students often face these and other obstacles, their grade point average is comparable to their FTIC state university peers (2.96 GPA vs. 3.14 GPA).²⁶

Florida College System transfer students represent over half of all upper-division students enrolled at State University System institutions.

Transfer students from the Florida College System (FCS) are also more racially and ethnically diverse than their FTIC state university peers. In fall 2015, 33 percent of FCS AA transfer students were Hispanic/Latino compared to 25 percent of FTIC state university students. During the same semester, 14 percent of FCS AA transfer students were Black/African-American compared to 12 percent of FTIC students enrolled at state universities.

Florida’s 2+2 transfer model is an essential mechanism for increasing postsecondary access and attainment and closing equity and opportunity gaps. In addition to serving, on average, an older, more diverse group of students, the state’s 2+2 pipeline also tends to more often support students who graduate from low-income and rural schools. According to Florida Department of Education data, students graduating from low-income schools are more likely to start their postsecondary education at a state college (67.7 percent) compared to graduates from higher-income schools (54.5 percent). The same is true for students attending rural schools, with 72.3 percent enrolling directly in a state college compared to 58.3 percent from non-rural schools.²⁷

The diverse profile of students who benefit from Florida’s 2+2 transfer model underscores the importance of efforts to improve it. While strengthening the model is not, by itself, the silver bullet answer to closing the state’s equity and opportunity gaps, it does represent an essential component of the solution.

How Florida has strengthened its 2+2 transfer model

The success of any state's transfer student pipeline should be evaluated on its ability to provide students with a pathway to earn a degree and enter the workforce. To understand how Florida has strengthened its 2+2 transfer model, consider the three generally-accepted performance metrics for monitoring transfer student outcomes, described in the table below.

Table 2: Overview of transfer student outcomes in Florida

Metric	Definition	Source	Performance
Associate's Degree Completion Rate	Percent of full-time associate in arts (AA) degree-seeking students enrolled at a Florida College System institution for the first time who complete their program at the same institution within three years (150% of program time) or less.	<i>Florida College System</i>	40.2% (2012-13 Cohort) ²⁸
Associate's Degree Articulation Rate	Percent of associate in arts (AA) degree earners from Florida College System institutions who enroll in a Florida College System or State University System bachelor's degree program within 2 years of completion.	<i>Florida College System</i>	67.6% (2012-13 Cohort) ²⁹
Bachelor's Degree Graduation Rate for Associate Degree Transfer Students	Percent of associate in arts (AA) degree completers who transfer from a Florida College System institution to a State University System institution in the fall term and complete a bachelor's degree at the same institution in four years or less.	<i>State University System</i>	68% (Fall 2012 Cohort) ³⁰

Combined, these metrics give a glimpse of the success of Florida transfer students at different points in their educations. Although these outcomes are among some of the highest in the country, there is still room to increase student success.

The variation between Florida institutions suggests there is more to learn from those demonstrating the greatest transfer student success. For example, Santa Fe College in Gainesville, the 2015 Aspen Prize winner for Top Community College in the nation, has a graduation rate of 57.5 percent, which is 17 percentage points higher than the Florida College System average and 30 percentage points higher than the lowest state college (see Appendix A).

Another example is Valencia College in Orlando, an Aspen Prize winner for Top Community College in America in 2011. Of its associate's degree (AA) completers, 74 percent continue enrollment in a bachelor's

degree program, a rate 6 percent higher than the Florida College System average and 39 percent higher than the lowest state college (see Appendix B).

The success of associate’s degree (AA) completers who transfer to a State University System institution also varies. For example, 82 percent of AA transfer students attending the University of Florida in Gainesville (ranked 9th best public university in the nation by *U.S. News & World Report*) graduate within four years of transferring, which is 15 percentage points higher than the State University System average and 24 percentage points higher than the lowest state university (see Appendix C).

There are a number of factors that contribute to the outcomes of transfer students at Florida state colleges and universities. For example, students who start at community or state colleges are more likely to require developmental education. Although the Florida Legislature initiated a number of developmental education reforms to improve student outcomes in 2013, because state colleges are open access, the academic preparation of incoming students can vary significantly. In addition to these academic factors, students who start at community or state colleges are more likely to face a number of other challenges referenced earlier, including family responsibilities, employment, longer commutes to class and financial difficulties, among other issues.³¹

In early 2016, the Florida Board of Governors established the Select Committee on 2+2 Articulation to review the statewide articulation law and policies and has since identified its own list of issues related to transfer students and the system in general (see table 3).³²

Table 3: Transfer challenges identified by Board of Governors Select Committee on 2+2 Articulation³³

Issue	Description
Academic transition	Confusing prerequisite information, difficult to meet prerequisites in highly sequenced programs, program admission not guaranteed, limited information for dual enrollment students, difficult to maintain accuracy of prerequisite information
Admissions process	Costly, time-consuming process
Cultural transition	Transfer shock ³⁴
Information on AA students	Data can’t describe all behavior, complex research questions

Whether individual transfer students face all or none of such challenges, they all have the same goal in common – they aim for a better life through education. And many do achieve their dreams. If education systems can better help transfer students resolve their common questions, such as “How many of my credits will transfer,” or “How much time do I have left to graduate if I want to major in this program instead of that one,” or “What are the different ways I can get a degree that gets me a job in this field,” tens of thousands of additional students could potentially achieve their dreams as well.

Another question transfer students often ask is, “Will I get into the university that is close to my home?” Florida’s current 2+2 articulation policy guarantees admission for associate’s degree completers to a state

university, but not necessarily *the* university that a student prefers. Data analyzed by the Florida Board of Governors shows this may be a barrier for some state college students, as 91 percent of associate degree completers apply to a single state university, suggesting they hold a strong preference for their transfer destination. Since most state college students are place bound, the inability to transfer to their institution of choice has been identified as a reason why some associate's degree completers don't enroll at a state university.

Targeted pathways offer solutions for improving transfer student success

To help resolve some of the myriad issues transfer students face, one strategy that has gained increased attention from the Florida Board of Governors Select Committee on 2+2 Articulation is stronger transfer partnerships between state colleges and universities. Partnerships, such as DirectConnect to UCF at the University of Central Florida and their regional state colleges, go beyond the state's traditional 2+2 articulation agreements and include a variety of enhancements, many of which are evidence-based strategies.³⁵ Sometimes referred to as "enhanced programs" or "targeted pathways," the partnerships listed in Table 4 include agreements that: (1) guarantee admission to a specific state university and in some cases,

Targeted transfer pathways go beyond the state's traditional 2+2 articulation agreements by offering students a direct path to a specific universities with tailored advising and other campus supports.

a specific bachelor's degree program at the university, (2) include requirements for students to meet specific benchmarks and criteria, (3) provide tailored advising and other campus services, and (4) establish on-time graduation pathways to their degree programs.

Such partnerships, already in place at 10 of the 12 state universities and all 28 state colleges (for examples, see Table 4), may be mandated by a bill introduced for the 2018 legislative session.³⁶ If passed, the proposed legislation referred to as the "College Competitiveness Act of 2018," would

establish 2+2 targeted pathway programs at each state college and state university to provide students guaranteed access to baccalaureate degree programs at state universities. In addition to mandating 2+2 targeted pathways, the bill also (1) establishes student eligibility criteria for participating in such programs, (2) establishes requirements for the articulation agreements between state colleges and universities, and (3) requires the partner institutions to collaborate more intentionally to eliminate barriers for their students enrolled in their targeted pathway programs.

Table 4: Examples of Florida 2+2 Articulation Enhancement Programs & Partnerships at State Universities³⁷

SUS Institution	Program Name	Partner FCS Institutions
Florida A&M University	TCC2FAMU Golden Guarantee PHSC2FAMU Program SF2FAMU Program Broward College	Tallahassee Community College Pasco-Hernando State College Santa Fe College Broward College
Florida Atlantic University	FAU Link Program	Broward College, Indian River State College, Palm Beach State College
Florida Gulf Coast University	SCF 2+2 Program	State College of Florida, Manatee-Sarasota
Florida International University	Connect4Success	Miami Dade College, Broward College, Florida Keys Community College, Palm Beach State College
Florida State University	TCC2FSU Golden Guarantee Program	Tallahassee Community College
University of Central Florida	DirectConnect to UCF UCF Online	College of Central Florida, Daytona State College, Eastern Florida State College, Lake Sumter State College, Seminole State College, Valencia College Florida Gateway College, Florida Keys Community College, Indian River State College, Miami Dade College, North Florida Community College, Pasco-Hernando State College, Polk State College
University of Florida	UF Connect	Santa Fe College
University of North Florida	UNF Connect SF2UNF SJRS to UNF Gateway FGC to UNF	Florida State College at Jacksonville Santa Fe College St. Johns River State College Florida Gateway College
University of South Florida	FUSE	Hillsborough Community College, St. Petersburg College, Polk State College Pasco-Hernando State College, Santa Fe College, State College of Florida, Manatee-Sarasota, College of Central Florida, South Florida State College
University of West Florida	2UWF	Gulf Coast State College, Northwest Florida State College, Pensacola State College, Tallahassee Community College
Florida Polytechnic University	N/A	N/A
New College of Florida	N/A	N/A

Such programs hold promise to further improve Florida’s 2+2 articulation system and build upon a set of evidence-based approaches that are increasingly being accepted as the new status quo in higher education across the country. The idea behind these enhanced articulation agreements is straightforward – college students are more likely to complete their degrees if they develop a plan as early as possible, have a clear pathway to their degrees and have the help they need to stay on track.³⁸ These approaches also incorporate lessons learned from cutting-edge research in cognitive science and behavioral economics that have led to better outcomes in other aspects of life, including exercise, financial decisions and personal health.

For example, research on behaviors tells us that having too many choices leads to indecision, procrastination and decision paralysis, which are counterproductive to earning a college degree.³⁹

Guided pathways to college completion provide a simpler set of options that help students make choices aligned with their future educational and career goals. Behavioral research also supports the importance of having predictable outcomes and timely feedback at crucial decision and progression points.⁴⁰ The traditional “cafeteria” transfer student model, where decisions and planning are made more casually, tends to leave students to their own devices, which can result in problems such as excess credits and longer time to degree.⁴¹

Effective transfer partnerships between institutions requires a strong commitment from leadership and a comprehensive approach with goals that are closely measured.

Best practices for targeted 2+2 transfer agreements in Florida

Enhanced or targeted 2+2 pathways have been in place at some Florida colleges and universities for more than a decade, and the concept has been around even longer. The Master Plan for Florida Postsecondary Education published in 1982 by the Florida Postsecondary Education Planning Commission (PEPC) emphasized the need for “effective cooperation between community colleges and universities” with common interests that fall within the same geographical area.⁴²

Yet, enhanced transfer articulation agreements are easier said than done. Strong transfer partnerships require a commitment to achieving transfer student goals, the creation of clear program pathways and shared advising and other campus supports and resources.⁴³ These kinds of activities require trust, communication and the breaking down of silos between institutions.

Using student records from a national dataset, researchers with the Community College Research Center at Columbia University (CCRC) and Aspen Institute College Excellence Program identified partnerships of two-

and four-year institutions that were effective in promoting student transfer and bachelor’s degree completion. After in-depth interviews with more than 350 faculty, administrators and students, the researchers identified a set of essential practices that promote transfer student success, which are listed below in Table 5.

Table 5: Strategies and Essential Practices for Strong Transfer Partnerships⁴⁴

Strategies	Essential Practices
Prioritize transfer	<ul style="list-style-type: none"> • 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 student success
Create clear programmatic pathways with aligned high-quality instruction	<ul style="list-style-type: none"> • 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 reliable processes for updating and improving program maps as program requirements evolve. • Design unconventional pathways to ensure students have access to rigorous programs.
Provide tailored transfer student advising	<p><i>Two-year college advising practices</i></p> <ul style="list-style-type: none"> • Clearly articulate students’ transfer options and help them determine, as early as possible, their field of interest, major of study, and preferred transfer destination. • Continuously monitor student progress, provide frequent feedback, and intervene quickly when students are off track. • Help students plan for and access the financial resources necessary to achieve their goals. <p><i>Four-year college advising practices</i></p> <ul style="list-style-type: none"> • 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.

Several Florida colleges and universities have embraced many of the evidence-based best practices described in Table 5. Here are a few examples:

Best Practice: “Bridge Advisors”

Connect4Success program at Florida International University (FIU), Miami Dade College, Broward College, Palm Beach State College and Florida Keys Community College

Connect4Success is a collaborative transfer pathway developed to increase student access and timely completion of the AA and bachelor’s degree for students transferring to FIU from state colleges in the South Florida region. The transfer pathway was designed to align with FIU’s focus on access and equity (FIU ranks 2nd highest among Florida public universities in the proportion of Pell students, at 51.4 percent of their student population). Building on Florida’s 2+2 articulation framework, Connect4Success guarantees admission to FIU for AA earners from partner colleges, adds timelines for completing program requirements, increases engagement with campus supports and resources – and perhaps most important – provides access to Bridge Advisors.



Bridge Advisors are FIU advisors who are located on their state college partner campuses who work directly with program students to help make them *transfer ready*. Bridge Advisors provide feedback on progress and key milestones, assist students with consequential course-making decisions (such as prerequisites) and connect students to signature events at FIU to help maintain their 4-year student identity and keep them motivated and excited about transferring. Bridge Advisors also work with college advisors to help students identify a major early, use 24/7 advising tools, and seek resources at both institutions.

Data from initial cohorts of program participants showed Connect4Success students were more likely to complete their AA and finish their degree in a timely manner. FIU’s strategic plan includes a goal to increase the graduation rate of its AA completing transfer students from 64 percent to 70 percent by 2020, which it is currently on track to meet thanks to the success of the program. The institution is so committed to reaching this goal that it incentivizes enrollment from part-time to full-time status and offers completion grants to students experiencing financial hardship.

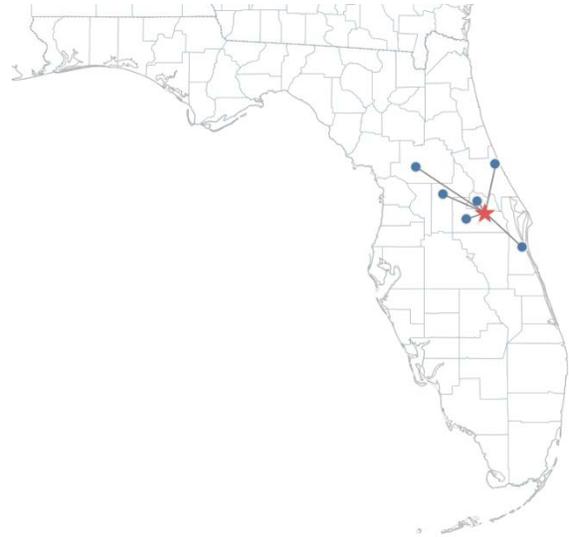
Best Practice: “Consortium Academic Collaboration Council”

DirectConnect to UCF program at University of Central Florida, College of Central Florida, Daytona State College, Eastern Florida State College, Lake Sumter State College, Seminole State College and Valencia College

Research also shows that effective transfer partnerships connect transfer student outcomes to the institutions’ missions and invest resources in the transfer student process. UCF found that investing in the marketing of the program was a key to its success. In fact, it purchased a billboard ad on one of the busiest interstates in the country.

DirectConnect to UCF is one of the nation’s first and most innovative transfer partnerships that guarantees admission to UCF for associate degree earners from one of its partner colleges. For students in the greater-Orlando area, the guaranteed access to a university close to home is invaluable, especially for the high volume of Latino and first-generation students the program serves. In an article published in Politico Magazine, Davis Jenkins, a researcher at the Community College Research Center (CCRC) at Columbia University referred to the award-winning transfer program as “a very important model for the country.”⁴⁵

The program has resulted in 30,000 degrees completed since 2009 and is one of the reasons why transfer students now outnumber first-time-in-college (FTIC) students enrolled at UCF. Leaders at the partner institutions attribute strong cross-institutional governance as the main reason for the program’s success. Referred to as the Consortium Academic Collaboration Council, administrators from DirectConnect institutions meet on a regular basis to resolve issues, align institutional policies and curricula, and keep lines of communication open.



Best Practice: “Grad Paths”

FUSE program at University of South Florida (USF), Hillsborough Community College, St. Petersburg College, Polk State College, Pasco-Hernando State College, State College of Florida, Manatee-Sarasota, College of Central Florida, South Florida State College and Santa Fe College

“Grad paths” are a core strategy of the FUSE program, which is a partnership of USF System institutions and state college partners in the greater Tampa Bay region. While most other targeted articulation agreements guarantee admission to a particular university, FUSE takes the partnership a step further, guaranteeing students admission into a specific degree program.

Grad paths map student pathways from enrollment to their state college through completion of a bachelor’s degree at USF, including all the necessary prerequisites, exams and application processes. Students who meet the criteria of their grad path, which includes a grade point average (GPA) threshold and semester limit, are guaranteed admission to their program of interest at USF and have what is needed to continue in the curriculum of their major. In efforts to increase degree completion rates at all of the partner institutions, FUSE students are also required to complete their associate’s degrees within three years and their bachelor’s degrees within three years of transfer.

Grad paths are primarily focused on, but not limited to, high-demand occupational areas requiring a bachelor’s degree. Examples include accounting, information technology, education, criminology, biomedical sciences and public health. To ensure students are staying on track with their grad path, advisors and administrators share timely data on student performance that can provide students with the support they need to complete their degree.



Discussion and recommendations

Florida's lauded 2+2 articulation system is today one of the state's primary mechanisms for developing a highly skilled and educated workforce, which is justification enough for making enhancements where possible. And most importantly, Florida students who make personal sacrifices, pay money and aim high to better their personal and financial futures have a much greater chance for success with every improvement made to the transfer process.

The good news is that many Florida colleges and universities have and continue to implement innovative practices and evidence-based approaches to increase transfer outcomes. In addition to the institution-level partnerships that now exist, system leaders and policymakers are engaged in strengthening such efforts through policies that bring best practices to scale.

To further improve on these outcomes, the following recommendations are offered for consideration:

- 1. Enhancements to 2+2 articulation agreements must maintain current levels of access and choice for students across the state.** While strong, regional institutional partnerships are expected to improve transfer student outcomes, we must ensure that access and choice are maintained for students across the state. The success of Florida's transfer system has allowed students from metro areas like Miami, Jacksonville, Orlando and Tampa, as well as from rural counties like Highlands, Madison and Okaloosa, the ability to transfer anywhere in the State University System so long as they complete their associate's degree and meet their institution's admissions criteria. As targeted pathways become more popular, it is important to track transfer patterns to ensure that students outside of the areas served by 2+2 articulation agreements continue to have access to Florida's public universities, given that some universities have limits on the number of transfer students they can admit within the scope of enrollment plans currently in place.
- 2. Include transfer student access and success metrics in the State University System performance-based funding model.** As the saying goes: what gets measured, gets done. Since the current iteration of performance funding for State University System institutions began in 2013, over \$700 million has been invested in performance funding.⁴⁶ During this time, most of the metrics across the system have seen improvements.⁴⁷ For example, the graduation rates of first-time-in-college (FTIC) students have increased by 3.9 percent over the last five years, an outcome that the performance funding model has helped to drive.

Among the ten performance-based funding metrics common to all state universities, none currently account for the success of transfer students.

However, among the ten performance metrics common to all institutions, none account for the access or degree completion of transfer students, who represent more than a quarter of the university system's new enrollments and over half of all upper-division students. Including a metric addressing transfer student access and success could drive additional innovation and potentially benefit thousands of additional students annually.⁴⁸ Although graduation rates for FTIC students have increased considerably under the performance metrics, graduation rates of transfer students from state colleges have decreased by 1 percent during the same period. Had transfer student graduation rates increased at the same rate as their FTIC peers, Florida universities would have awarded an estimated additional 2,700 bachelor's degrees. New transfer student metrics should not be exclusive to associate's degree completers from state colleges, as more than 40,000 students transfer from FCS institutions without an AA or from another postsecondary institution.⁴⁹

- 3. Changes to advising resources and web-based tools should include the input of advisors and transfer students before implementation.** A significant amount of time has been spent on the conception and creation of various web-based tools and resources to help transfer students navigate

Florida's 2+2 articulation process, but students often do not use them. The Florida Board of Governors Select Committee on 2+2 Articulation has included in its work plan a strategy to develop a comprehensive and easily accessible web-based 2+2 advising toolkit, which could be beneficial if its functionality serves student needs and it is marketed to students in ways that will incentivize its use. Seeking the input and guidance of students and advisors at the K-12 and postsecondary levels would help ensure that the state's investment in such web-based tools achieves its intended outcomes. Alignment with existing state-funded tools would help achieve this goal. For example, FACTS.org was re-designed and re-launched as FloridaShines.org in 2015, and has several advising tools and resources intended for transfer students.

- 4. Maintain bachelor's degree access at Florida College System institutions.** The transition from a 2-year college to a 4-year college may not be a viable solution for all students. For example, transportation and commute time can pose issues, on top of the fact that many Florida College System students juggle non-school obligations such as family and work responsibilities. Thus, for some students, staying at their state college to complete their bachelor's degree is their best, and possibly only, option. In Florida, 27 of the 28 Florida College System institutions offer bachelor's degrees aligned with regional workforce needs, with many resulting in high starting salaries and job placement rates. The bachelor's degree option at these institutions should be maintained and strengthened.

State universities enroll over 72,000 associate's degree earners from Florida College System institutions each year, making Florida's 2+2 system one the state's primary mechanisms for developing a highly skilled and educated workforce.

5. **Provide system level data to help institutions further promote their transfer student initiatives.** Through identifying issues facing transfer students in Florida, the Board of Governors Select Committee on 2+2 Articulation identified a number of questions related to student outcomes that cannot be answered with existing data. Work is underway to provide a data toolkit to help institutions better understand issues facing students. System-wide tracking and reporting on such data would help to shine a light on what is working and further strengthen transfer outcomes over time.
6. **Identify ways to use state financial aid to boost transfer student outcomes.** Currently, the majority of Florida state financial aid is dispersed to students attending 4-year institutions. Given that the majority of Florida high school graduates start at a state college, examining potential financial aid programs geared toward prospective transfer students beginning with enrollment at the state college could help to improve outcomes.
7. **Advise students about transfer and articulation before they get to college.** Students and parents face an increasing, and at times, overwhelming amount of information related to the college-going process. Because the majority of K-12 graduates start their postsecondary education at a Florida College System institution, further research is warranted to ensure students are aware of Florida's transfer guarantees so they understand the available pathways to earning a degree. To discover where best practices are being utilized and gaps in resources exist, further research would be helpful to learn how college advising takes place at the state's top feeder high schools to state and community colleges. Included in Appendix D is a list of Florida high schools where 75 percent or more graduates who attend college choose a Florida College System institution.



Florida College Access Network (FCAN) is Florida's first collaborative network committed to ensuring all Floridians have the opportunity to achieve an education beyond high school and prosper in Florida's dynamic economy. Our mission is to create and sustain a statewide network that catalyzes and supports communities to increase college and career preparation, access, and completion for all Florida students. Our vision for Florida is Goal 2025: For 60% of working-age Floridians to hold a high-quality postsecondary degree or credential by the year 2025.

As a nonpartisan organization, FCAN strives to expand knowledge of research, data, policies and practices that impact postsecondary access and attainment in Florida. This policy brief is intended as an educational resource and does not constitute an endorsement or opposition to any specific bill or legislation. FCAN is a statewide organization hosted by the University of South Florida System (USF). The statements and positions presented are those of FCAN and are not made on behalf of the USF Board of Trustees or intended to be in any way representative to USF.

Data Appendix

Appendix A: Associate's Degree (AA) Completion Rate at Florida College System institutions: 2012-13 Cohort

College Name	Total Students in Cohort	Completed within Three Years	Completion Rate
Broward College	1,943	733	37.7%
College of Central Florida	634	232	36.6%
Chipola College	317	149	47.0%
Daytona State College	1,094	430	39.3%
Eastern Florida State College	1,354	680	50.2%
Florida SouthWestern State College	1,083	385	35.5%
Florida State College at Jacksonville	1,628	652	40.0%
Florida Gateway College	169	94	55.6%
Florida Keys Community College	120	36	30.0%
Gulf Coast State College	337	161	47.8%
Hillsborough Community College	2,144	678	31.6%
Indian River State College	982	400	40.7%
Lake-Sumter State College	436	184	42.2%
Miami Dade College	6,468	2,439	37.7%
North Florida Community College	133	60	45.1%
Northwest Florida State College	435	166	38.2%
Palm Beach State College	1,678	701	41.8%
Pasco-Hernando State College	1,119	409	36.6%
Pensacola State College	794	262	33.0%
Polk State College	870	238	27.4%
Santa Fe College	1,145	658	57.5%
Seminole State College	1,606	706	44.0%
South Florida State College	240	102	42.5%
St. Johns River State College	504	234	46.4%
St. Petersburg College	1,367	536	39.2%
State College of Florida, Manatee-Sarasota	1,007	369	36.6%
Tallahassee Community College	1,787	669	37.4%
Valencia College	4,324	2,012	46.5%
SYSTEM	35,718	14,375	40.2%

Source: Florida College System, Research & Analytics. Cohort includes full-time associate in arts (AA) degree seeking undergraduate students who are enrolled in college for the first time.

Appendix B: Florida College System Associate's Degree (AA) Graduates Enrolled in a Florida College System (FCS) or State University System (SUS) Bachelor's Degree Program: 2013-14

College Name	Total Students in Cohort	Percent Found in FCS	Percent Found in SUS	Total Found in FCS or SUS
Broward College	4,507	9.9%	58.5%	68.4%
College of Central Florida	931	19.1%	34.0%	53.2%
Chipola College	275	22.2%	35.3%	57.5%
Daytona State College	1,640	24.1%	35.5%	59.6%
Eastern Florida State College	2,280	10.4%	54.6%	65.0%
Florida SouthWestern State College	1,626	19.2%	44.2%	63.5%
Florida State College at Jacksonville	3,593	19.3%	44.1%	63.3%
Florida Gateway College	270	7.4%	35.6%	43.0%
Florida Keys Community College	106	1.9%	42.5%	44.3%
Gulf Coast State College	629	7.9%	47.9%	55.8%
Hillsborough Community College	2,657	3.3%	63.7%	67.1%
Indian River State College	1,749	44.0%	32.7%	76.7%
Lake-Sumter State College	528	6.8%	59.7%	66.5%
Miami Dade College	8,442	14.7%	54.5%	69.2%
North Florida Community College	138	2.2%	32.6%	34.8%
Northwest Florida State College	877	20.8%	42.4%	63.2%
Palm Beach State College	3,498	13.1%	54.2%	67.3%
Pasco-Hernando State College	1,137	9.4%	41.6%	51.0%
Pensacola State College	1,095	9.3%	54.9%	64.2%
Polk State College	1,224	32.9%	34.1%	67.0%
Santa Fe College	2,250	15.1%	53.2%	68.3%
Seminole State College	2,119	12.0%	61.5%	73.5%
South Florida State College	256	23.0%	39.5%	62.5%
St. Johns River State College	679	15.8%	42.1%	57.9%
St. Petersburg College	3,042	36.4%	39.6%	76.1%
State College of Florida, Manatee-Sarasota	1,198	8.8%	56.1%	64.9%
Tallahassee Community College	2,258	0.9%	69.3%	70.2%
Valencia College	6,128	2.3%	71.7%	74.0%
SYSTEM	55,132	14.4%	53.2%	67.6%

Source: Florida College System, Research & Analytics. Reflects the percent of Associate in Arts (AA) graduates during the 2013-14 academic year who then enrolled in a Florida College System (FCS) or State University System (SUS) Bachelor's degree program within two academic years (includes 2013-14, 2014-15, or 2015-16).

Appendix C: Four-year Graduation Rate of Florida College System Associate's Degree (AA) transfer students at State University System of Florida institutions: 2012 Cohort

State University Name	Location	Total Students in Cohort	Completed within Four Years	Graduation rate
Florida A&M University	Tallahassee	169	104	61.5%
Florida Atlantic University	Boca Raton	1,682	1,024	60.9%
Florida Gulf Coast University	Fort Myers	441	286	64.9%
Florida International University	Miami	3,027	1,931	63.8%
Florida Polytechnic University	Lakeland	N/A	N/A	N/A
Florida State University	Tallahassee	1,739	1,295	74.5%
New College of Florida	Sarasota	**	**	**
University of Central Florida	Orlando	5,808	3,689	63.5%
University of Florida	Gainesville	1,460	1,193	81.7%
University of North Florida	Jacksonville	1,321	799	60.5%
University of South Florida	Tampa	2,527	1,710	67.7%
University of West Florida	Pensacola	634	365	57.6%
SYSTEM	--	18,813	12,656	67.3%

Source: State University System of Florida Board of Governors. Note: System totals are more than the sum of SUS institutions due to transfer students who transfer again and graduate. Fields with ** reflect colleges with fewer than 10 students in a cohort and are masked for privacy. Florida Polytechnic University, which admitted students for the first time in fall 2014, does not yet have data for this metric (N/A).

Appendix D: Florida public high schools where at least 75% of college-going high school graduates attend a Florida College System (FCS) institution the following fall: Class of 2015

School Name	District	High School Graduates (Class of 2015)	High School Grads Attending Florida Colleges	High School College-going Grads who attend FCS	% of HS College-going Grads who attend FCS
Marianna High School	Jackson	151	96	89	92.7%
Mater Academy E. Charter HS	Dade	79	60	53	88.3%
Hialeah Senior High School	Dade	569	352	308	87.5%
Miami Senior High School	Dade	517	301	261	86.7%
Bradford High School	Bradford	151	74	63	85.1%
Professional & Tech. High	Osceola	150	98	83	84.7%
Okeechobee High School	Okeechobee	341	163	138	84.7%
Bridgeprep Acad. of A&M	Dade	78	51	43	84.3%
Miami Edison Senior HS	Dade	137	61	51	83.6%
Liberty High School	Osceola	341	174	145	83.3%
Blountstown High School	Calhoun	92	52	43	82.7%
South Tech Academy	Palm Beach	239	119	98	82.4%
Frank H. Peterson Academies	Duval	214	82	67	81.7%
Union County High School	Union	135	64	52	81.3%
Pine Ridge High School	Volusia	306	128	103	80.5%
South Miami Sr High School	Dade	446	300	241	80.3%
Miami Southridge Sr.High	Dade	373	155	124	80.0%
St. Lucie West Centennial	St. Lucie	511	278	222	79.9%
Weeki Wachee High School	Hernando	285	134	107	79.9%
Labelle High School	Hendry	230	129	103	79.8%
Keystone Heights Jr-Sr High	Clay	186	85	67	78.8%
Fort Pierce Westwood HS	St. Lucie	187	85	67	78.8%
Santa Fe High School	Alachua	239	151	119	78.8%
John I. Leonard High School	Palm Beach	537	254	199	78.3%
Port St. Lucie High School	St. Lucie	319	180	141	78.3%
Pinellas Park High School	Pinellas	433	216	169	78.2%
Columbia High School	Columbia	320	146	114	78.1%
Hialeah-Miami Lakes Sr. High	Dade	297	159	124	78.0%
Rutherford High School	Bay	212	121	94	77.7%
Baker County Senior HS	Baker	262	103	80	77.7%

Appendix D: Florida public high schools where at least 75% of college-going high school graduates attend a Florida College System (FCS) institution the following fall: Class of 2015 (cont.)

School Name	District	High School Graduates (Class of 2015)	High School Grads Attending Florida Colleges	High School College-going Grads who attend FCS	% of HS College-going Grads who attend FCS
Osceola High School	Osceola	467	258	200	77.5%
Treasure Coast High School	St. Lucie	547	329	255	77.5%
Dunnellon High School	Marion	206	84	65	77.4%
Dunedin High School	Pinellas	326	196	151	77.0%
Southwest Miami Senior High	Dade	673	479	368	76.8%
Wakulla High School	Wakulla	268	116	89	76.7%
G. Holmes Braddock Sr. High	Dade	654	463	355	76.7%
Somerset Academy Charter	Dade	83	60	46	76.7%
Westland Hialeah Senior HS	Dade	316	197	151	76.6%
Miami Sunset Senior HS	Dade	381	256	196	76.6%
Williston High School	Levy	104	51	39	76.5%
Hialeah Gardens Senior HS	Dade	584	386	295	76.4%
S. Dade Senior High School	Dade	570	270	206	76.3%
Miami Coral Park Senior High	Dade	544	365	278	76.2%
Santalucas Community High	Palm Beach	519	293	223	76.1%
Fort White High School	Columbia	120	58	44	75.9%
Englewood High School	Duval	268	91	69	75.8%
North Marion High School	Marion	271	91	69	75.8%
Northeast High School	Broward	361	207	156	75.4%
Boynton Beach Comm. HS	Palm Beach	316	146	110	75.3%
Piper High School	Broward	476	223	168	75.3%
American Senior High School	Dade	392	222	167	75.2%
West Port High School	Marion	552	269	202	75.1%
Deltona High School	Volusia	328	176	132	75.0%
Miami Springs Senior HS	Dade	319	212	159	75.0%

Source: Florida Department of Education. Includes only Florida public high schools with 50 students or more attending a Florida college. Florida colleges include in-state public postsecondary institutions (Florida College System, State University System of Florida, District Technical Centers) and Independent Colleges of Florida institutions.

NOTES

- ¹ Jenkins, Davis and John Fink. What We Know About Transfer. Community College Research Center. January 2015. <https://ccrc.tc.columbia.edu/media/k2/attachments/what-we-know-about-transfer.pdf>.
- ² In this brief, we use the term state college to refer to the 28 member colleges of the Florida College System, for clarity. State colleges in Florida serve the same purpose as public 2-year colleges or community colleges in other states or contexts.
- ³ Florida College System 2018 Fact Book.
- ⁴ Florida Department of Education, Florida College System, Research & Analytics.
- ⁵ Readers of this brief should be aware that articulation agreements between Florida public and for private institutions also exist. The focus of this brief is to explore best practices and ways to enhance the transfer process among public state and community colleges and public universities. For more information on articulation agreements between public and private postsecondary institutions, see <http://www.fldoe.org/policy/articulation/articulation-agreements.stml>.
- ⁶ "Report: Florida is Number 1 State for Higher Education," *U.S. News and World Report*. March 3, 2017, <https://www.usnews.com/news/best-states/florida/articles/2017-03-03/report-florida-is-number-1-state-for-higher-education>. U.S. Chamber of Commerce's Institute for a Competitive Workforce. 2012. "Leaders & Laggards: A State-by-State Report Card on Public Postsecondary Education." Washington, D.C. <https://www.uschamberfoundation.org/reportcard/files/Leaders-and-Laggards-2012.pdf>.
- ⁷ Jenkins, Davis and John Fink. Tracking Transfer: New Measures of Institutional and State Effectiveness in Helping Community College Students Attain Bachelor's Degrees. Community College Research Center. January 2016. <https://ccrc.tc.columbia.edu/publications/tracking-transfer-institutional-state-effectiveness.html>.
- ⁸ For more on states that have considered legislation to enhance transfer partnerships between 2-year and 4-year institutions in 2017, see "Guided Pathways to College Completion," Education Commission of the States, April 2017, https://www.ecs.org/ec-content/uploads/Policy_Snapshot_Guided_Pathways_to_College_Completion-1.pdf.
- ⁹ Shapiro, Doug, Afet Dunder, Faye Huie, Phoebe Khasiala Wakhungu, Win Yuan, Angel Nathan and Youngsik Hwang. Tracking Transfer: Measures of Effectiveness in Helping Community College Students to Complete Bachelor's Degrees (Signature Report No. 13). National Student Clearinghouse Research Center. September 2017. <https://nscresearchcenter.org/signaturereport13/>. U.S. Government Accountability Office. *Higher Education: Students Need More Information to Help Reduce Challenges in Transferring College Credits*. GAO-17-574. Washington, DC, 2017. <https://www.gao.gov/products/GAO-17-574>. Fink, John and Davis Jenkins. Takes Two to Tango: Essential Practices of Highly Effective Transfer Partnerships. Community College Research Center. October 2017. <https://ccrc.tc.columbia.edu/publications/takes-two-tango-essential-practices-highly-effective-transfer-partnerships.html>.
- ¹⁰ Florida Senate Bill 540, "College Competitiveness Act of 2018," <https://www.flsenate.gov/Session/Bill/2018/00540>.
- ¹¹ Florida Department of Education Office of Articulation. *Planning on Pursuing a Bachelor's Degree? 2+2 Pathways to Success*. Tallahassee, FL, October 2014. http://www.fldoe.org/core/fileparse.php/5421/urlt/0078404-pathways_to_success.pdf.
- ¹² For a complete list of articulation agreements between Florida College System institutions and private postsecondary institutions, see Florida Department of Education Postsecondary Articulation Agreements at <http://www.fldoe.org/policy/articulation/articulation-agreements.stml>. Readers of this brief should also be aware that articulation policies also exist for students seeking credentials from the state's 46 career education centers to higher levels of education and training.
- ¹³ Florida Department of Education Office of Articulation. *Statewide Articulation Manual*. Tallahassee, FL, September 2014. <http://www.fldoe.org/core/fileparse.php/5423/urlt/statewide-postsecondary-articulation-manual.pdf>.
- ¹⁴ Sun, Jeffrey, Gregory Anderson, and Mariana Alfonso. 2006. "Effectiveness of Statewide Articulation Agreements on the Probability of Transfer: A Preliminary Policy Analysis." *The Review of Higher Education* 29 (3): 261-291. doi:10.1353/rhe.2006.0001. http://muse.jhu.edu/journals/review_of_higher_education/v029/29.3anderson.html.
- ¹⁵ For a full list, see State University System Florida Board of Governors Index of 2+2 Statutes and Policies http://www.flbog.edu/documents_meetings/0199_0978_7294_6.2.2%202+2%2002b_2+2%20Policies.pdf.
- ¹⁶ Florida Statutes § 1007.24.
- ¹⁷ Florida Statutes § 1007.23.

- ¹⁸ Students who have received an associate in Arts (AA) degree from an institution within the Florida College System are guaranteed admission with 60 semester (credit) hours into the State University System of Florida. However, *admission to a specific program at a given university may not be assured*. Additionally, some degree programs require specific lower division coursework outside common prerequisites. Depending upon a student's course selection, the 60 credit hours earned in the AA degree will be accepted, however, not all of the credit may apply towards a student's bachelor degree program. For more on this topic, see Florida Department of Education Statewide Articulation Manual <http://www.fldoe.org/core/fileparse.php/5423/urlt/statewide-postsecondary-articulation-manual.pdf>.
- ¹⁹ Florida Statutes § 1007.23.
- ²⁰ Florida Statutes § 1007.23.
- ²¹ Florida Department of Education. *Comparison of Florida's Articulated Acceleration Programs*. Tallahassee, FL. February 2017. <http://www.fldoe.org/core/fileparse.php/5421/urlt/0078393-cfaap.pdf>.
- ²² Florida Statutes § 1007.01.
- ²³ State University System of Florida Board of Governors. *Improving 2+2 Articulation Implementation Plan*. Tallahassee, FL. March 2017. http://www.flbog.edu/documents_meetings/0262_1052_7966_6.4.2%20TWO%2004b_2+2%20Implementation%20Plan_030117_JMI_formatted.pdf.
- ²⁴ U.S. Department of Education. *Demographic and Enrollment Characteristics of Nontraditional Undergraduates: 2011-12*. NCES 2015-025. Washington, DC, 2016. <https://nces.ed.gov/pubs2015/2015025.pdf>.
- ²⁵ State University System of Florida Board of Governors. *Overview of 2+2 Transfer Students in the State University System*. Tallahassee, FL. March 2016. http://www.flbog.edu/documents_meetings/0199_0978_7295_6.3.2%202+2%2003b_AA%20Transfer%20data%20points_JMI.pdf.
- ²⁶ Florida Board of Governors Student Data Course File. State University System Upper Division Student Performance by Student Source, 2015-16.
- ²⁷ Based on FCAN analysis of Florida Department of Education data. Low-income schools include schools where 60% or more students are eligible for a free or reduced-price lunch. Rural schools include schools in rural counties defined by the Florida Department of Economic Opportunity according to F.S. 288.0656.
- ²⁸ Florida Department of Education, Florida College Graduates Succeed (EdStats). <https://edstats.fldoe.org/SASPortal/public>.
- ²⁹ Florida Department of Education, Florida College System, Research & Analytics.
- ³⁰ State University System of Florida Board of Governors. *2015-25 System Accountability Report*. Tallahassee, FL. March 2017. http://www.flbog.edu/board/_doc/accountability/ar_2015-16/2015_16_System_Accountability_Report_Summary_FINAL_2017-03-30.pdf.
- ³¹ U.S. Department of Education, 2016.
- ³² To view meeting agendas, materials and work plans for the Board of Governors Select Committee on 2+2 Articulation, see http://www.flbog.edu/board/committees/index.php?committee_id=14.
- ³³ For a full description of the issues identified by the Florida Board of Governors Select Committee on 2+2 Articulation, see http://www.flbog.edu/documents_meetings/0260_1037_7837_2.2.3%202+2%2002a_2+2Workshop%20Roadmap.pdf.
- ³⁴ Transfer shock is a term coined by researchers that describes the phenomenon that occurs among students that transfer from one postsecondary institution to another that commonly results in a decline in academic performance. For more, see "Transfer Shock: Why is a Term Forty Years Still Relevant," National Academic Advising Association (NACADA) Clearinghouse, 2007, <http://www.nacada.ksu.edu/Resources/Clearinghouse/View-Articles/Dealing-with-transfer-shock.aspx>.
- ³⁵ Wyner, Joshua, KC Deane, Davis Jenkins and John Fink. *The Transfer Playbook: Essential Practices for Two- and Four-Year Colleges*. Community College Research Center and The Aspen Institute. May 2016. <https://ccrc.tc.columbia.edu/publications/transfer-playbook-essential-practices.html>.
- ³⁶ See Senate Bill 540, <https://www.flsenate.gov/Session/Bill/2018/00540>.
- ³⁷ Table adapted from listing of enhancement programs and partnerships at state universities from January 2017 Florida Board of Governors Select Committee on 2+2 Articulation meeting with modifications to partnerships at UCF and USF by FCAN. Table is not inclusive of all articulation programs, partnerships and agreements. For more, see http://www.flbog.edu/documents_meetings/0260_1037_7837_2.2.2%202+2EnhancementPrograms.pdf.

³⁸ Bailey, Thomas, Shanna Smith Jaggars and Davis Jenkins. What We Know About Guided Pathways. Community College Research Center. April 2015. <https://ccrc.tc.columbia.edu/media/k2/attachments/What-We-Know-Guided-Pathways.pdf>.

³⁹ Ibid.

⁴⁰ Ibid.

⁴¹ Ibid.

⁴² Florida State Board of Education Postsecondary Education Planning Commission. *The Master Plan for Florida Postsecondary Education*. Tallahassee, FL. November 1982. [http://www.cepri.state.fl.us/Documents/ProjectsIndexedBy/1982%20Master%20Plan%20for%20Florida%20Postsecondary%20Education%20\(PEPC\).pdf](http://www.cepri.state.fl.us/Documents/ProjectsIndexedBy/1982%20Master%20Plan%20for%20Florida%20Postsecondary%20Education%20(PEPC).pdf).

⁴³ Wyner et al., *The Transfer Playbook: Essential Practices for Two- and Four-Year Colleges*, 2016.

⁴⁴ Ibid.

⁴⁵ Amrein, Sandra. "Where Dreams Come True." *Politico Magazine*, June 18, 2015. <http://www.politico.com/magazine/story/2015/06/orlando-what-works-119159>.

⁴⁶ From Slide 1, includes performance-funding (PBF) appropriations from 2013-14 through 2017-18 including Targeted Educational Attainment (TEAm) Grant, see Summary of State University System (SUS) Performance Based Funding through 2017-18. http://www.flbog.edu/board/office/budget/_doc/performance_funding/PBFPerUniversity2016-17.pdf.

⁴⁷ State University System Florida Board of Governors. *Performance Based Funding At A Glance: 2014-2017*. Tallahassee, FL. January 2018. http://www.flbog.edu/board/office/budget/_doc/performance_funding/PBF_Brochure_Senate_Presentation_Page_2.jpg.

⁴⁸ State University System of Florida Board of Governors. Overview of 2+2 Transfer Students in the State University System. Tallahassee, FL. March 2016. http://www.flbog.edu/documents_meetings/0199_0978_7295_6.3.2%20+2%2003b_AA%20Transfer%20data%20points_JMI.pdf.

Florida Department of Education, Division of Florida Colleges. *The Florida College System 2016 Annual Report*. Tallahassee, FL. November 2017. [https://www.floridacollegesystem.com/sites/www/Uploads/Publications/FCS%20Annual%20Reports/2016%20-%20FINAL%20\(PDF\).pdf](https://www.floridacollegesystem.com/sites/www/Uploads/Publications/FCS%20Annual%20Reports/2016%20-%20FINAL%20(PDF).pdf)

⁴⁹ State University System of Florida Board of Governors, March 2016.