HIGHER EDUCATION COORDINATING COUNCIL

Supplemental Materials to Accompany the 2015 Annual Report

2015 Supplemental Materials Contents

Background to 2015 HECC Recommendations

Comments should be directed to:

Matthew Bouck
Director, Office of Articulation
Florida Department of Education
matthew.bouck@fldoe.org

Diane McCain
Director, External Relations
Board of Governors
State University System of Florida
diane.mccain@flbog.edu

Background to 2015 HECC Recommendations

2015 Priority Area #1: Continue to encourage and support all education sectors in defining key performance metrics to align with statewide higher education policy and fiscal goals, recognizing that performance benchmarks might differ by delivery sector and program.

At its June 26, 2015 meeting, a motion was made by HECC member State University System Chancellor Marshall Criser. After discussion, the motion was approved as follows:

> The HECC recommends to the Governor and Legislature that each institution or sector that receives either direct, or through student merit or need-based financial aid, state appropriations should annually submit to the Governor, the President of the Senate and the Speaker of the House a report that represents the institution or sector's performance in achieving student access, retention, graduation, and student employment or continued study within one year of graduation.
>
> The HECC recognizes that the mission and scope of institutions or sectors will necessitate metrics that reflect their individual characteristics. Where applicable, the report should be compiled by the governing or administrative body for each institution or sector.
>
> The HECC further suggests that these reportable variables be reviewed periodically and adjusted to accommodate variations, modifications, and innovations in the delivery systems and institutions engaged in providing higher education.
>
> The HECC will collect the reports and make available on one uniform website. This will also be included in the HECC's annual report.

Background

In its 2014 report the Higher Education Coordinating Council (HECC) agreed on four recommendations for further exploration in 2015. Recommendation One was to *"Continue to encourage and support all education sectors in defining key performance metrics to align with statewide higher education policy and fiscal goals, recognizing that performance benchmarks might differ by delivery sector and program."* This language is in consonance with similar language with regard to accountability contained in HECC's initial (December 2011) report.

In 2015 HECC considered whether such key performance metrics are appropriate to use in a state-focused accountability model for those institutions receiving state dollars either as a direct appropriation or in the form of student financial aid. HECC saw its role as exploring whether a core of similar but not necessarily identical metrics could be identified across all sectors and then advocating for their visibility to stakeholders.

Core Measures

In order to realize such a set of what might be called core measures, HECC emphasizes that the general metric categories should be few, relevant, and easily understood. HECC suggests that, while there are undoubtedly other areas for which the sectors employ accountability measures, there are four areas that would be likely candidates for identifying measures that would rise to a sufficient level of interest and importance and that could apply to a cross-sector accountability model. These are:

- access,
- retention,
- graduation, and
- student employment or continued study.

The Core Measures Paradigm is reinforced with a set of assumptions.
- All sectors typically have many accountability measures, some of which are required by either a governing board, by federal reporting, or by the Legislature.
- Within each sector's array of measures, there is a meaningful and minimal core focusing on student success and institutional efficiency.
- These measures need not and, in fact, cannot be calculated in exactly the same way across all sectors.
- Nevertheless, they <u>can</u> be utilized to demonstrate a commitment to performance in key areas and across all sectors.

HECC's Discussion and Deliberation

As one of HECC's four primary recommendations from its 2014 report, a great deal of time was spent in discussing the pros and cons of a cross-sector focus on postsecondary accountability. Issues included:
- which metrics, or metric areas, might be considered as the best candidates,
- comparisons between unlike institutions with different missions and different student bodies,
- whether institutions that received state funds only in the form of student aid should be included,
- the extent to which metrics might be similar in nature but differently defined, and
- the usage of such a model, including potentially negative unintended consequences.

Metrics and Accountability

HECC believes that effectively utilizing core measures requires certain assumptions.
- Sectors must first be comfortable that any definitions or calculations associated with their core measures are fair, practicable, and clearly understood.
- Performance should be viewed through the two lenses of institutional levels of excellence and institutional levels of improvement.
- To that end, each institution in a sector might be measured against a sector benchmark set for any given measure to determine whether that institution is low-performing, adequate-performing, or high-performing. Any such determinations can and should be assessed over time.
- To be most effective, an accountability model should take into account levels of both base and new state funding, whether that funding accrues to the institution or directly to the student.

Routes2Success: The Higher Education Coordinating Council's Transfer Project

Routes2Success is a higher education coordination strategy that would advance collaborative work that all four higher education sectors support and will sustain. There are 20 recommendations to update the state's largest transfer of college credit program, the Associate of Arts 2+2 program. The goal of this transfer project is to promote simple, sure and swift transfer routes, for more students to earn more credits and to complete their degrees more efficiently, lowering student, college, university and state costs of bachelor's degrees. Two recommendations relate to school, college, university and one-stop center counseling programs to upgrade bachelor's degree route planning at schools, colleges and universities. Six recommendations focus on dual enrollment and acceleration mechanisms to secure and speed earned credits application to degrees. Four recommendations focus on inducing AA program performance and boosting AA degree production. To ensure sufficient bachelor's degree completion capacity, eight recommendations focus on the current on-line, on-campus and on-site bachelor's degree capacity and needed new on-line, on-campus and on-site capacity statewide and regionally. Many of the recommendations will create tools that will benefit all students in Florida. There is also a recommendation to continue HECC's work on the applicable Associate of Science Degrees and their routes to success.

The Council envisions that every recommendation will benefit Florida and that these recommendations serve to benefit all sectors of postsecondary education, while improving and expanding options for both high school students interested in advancing on their college route and current students already engaged in Florida's postsecondary institutions, especially with the continued growth in non-traditional student population.

The goal of this AA 2+2 transfer project is to promote simple, sure and swift transfer routes for more students to earn more credits and to complete their degrees more swiftly, lowering student, college, university and state costs of bachelor's degrees

Overview – Transfer Routing

More than fifty years ago, Florida created a community college system to provide simplified routes to higher education degrees. An Associate of Arts Degree (AA) was a 60 credit degree that completed a bachelor's degree general education coursework and led to 60 additional credits of bachelor's degree major coursework and a bachelor's degree. An Associate of Science Degree (AS) was a 60 credit "terminal degree" that completed all the course work required for hundreds of specific and varied jobs and careers. Florida built the infrastructure to support these degree routes which includes a statewide course numbering system (SCNS) and articulation agreements between institutions. This infrastructure ensured that credits earned could be transferred among state, independent and private colleges and universities. Today, there are more than 350,000 AA degree-seeking students and more than 100,000 AS degree-seeking students (traditional and non-traditional) at Florida's state colleges, as well as thousands more AA and AS students at state, independent and private higher education institutions in Florida.

Thirty years ago, Florida created a Dual Enrollment Program that enables high school students to take college courses that fulfill both high school diploma and college degree course requirements.

Today, more than 50,000 high school students are taking dual enrollment courses at Florida colleges and universities. Thousands more high school students are taking similar high school/college credit courses: Advanced Placement (AP); International Baccalaureate (IB); and Advanced International Certificate of Education (AICE).

Today, Florida has an established and exceptional transfer credit design. Other states want to replicate Florida's system. Florida needs, however to update its designs, responding to emerging home school, high school, traditional, and non-traditional student challenges.

This project recommends strategies that improve students' ability to navigate more effectively the AA to bachelor's degree transfer routing infrastructure by promoting simple, sure and swift transfer routes for more students to earn more credits and to complete their degrees more efficiently.

Transfer Routing: Routes to Bachelor's Degrees
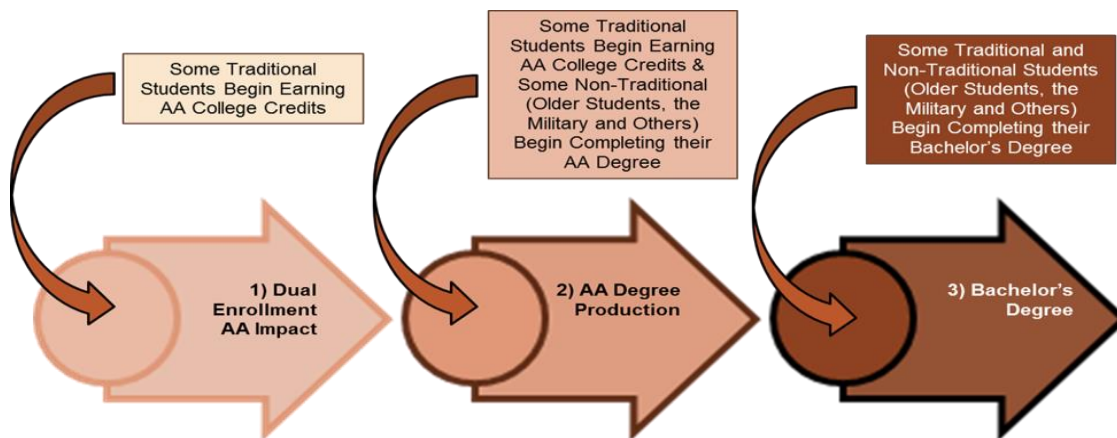
The primary bachelor's degree transfer route is the AA 2+2 route with more than 400,000+ current students, completing general education degrees. Updating this more than 50 year old AA 2+2 design is the focus of this project.

Upgrading the AS transfer route which includes industry certifications, dual enrollment, other certificates, AS degrees and bachelor's degrees is a complex and challenging next coordination assignment for HECC. Elements of this project may be adopted and adapted for that next coordination assignment.
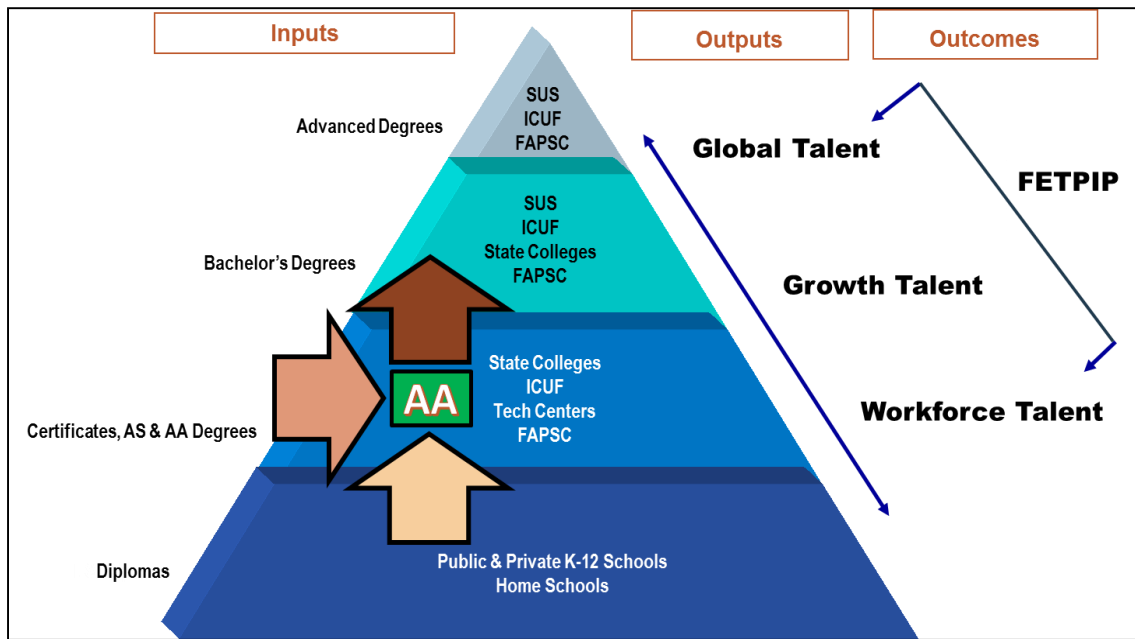
Direction & Velocity) Fuel = Completion

As President William D. Law, Jr. of St. Petersburg College testified to the Senate, a college's performance challenges are direction & velocity. What is a student's destination? How fast are they going to get there? His is a correct equation and he's right. We suggest a third factor – Fuel. Both an individual's fuel (the funding that an individual brings to pay educational and living expenses) and donors' fuel (the funding that federal, foundation, state, institutional and local donors add to the equation). This equation should guide updating and upgrading of Florida's transfer system.

Direction - Students who know their degree direction will reach their destination more quickly. Whether they are: in high school or long ago got their diploma; full-time or part-time; traditional student or a non-traditional student; Bright Futures students or not; from an "A" school or a school with a poorer grade; whatever individual challenge they may have. Direction-deciding early for transferring students will boost completions.

Velocity – In 2012-2013, AA degreed-students transferring to state universities completed their degrees with an average of 138.8 credits, well above the 60 credits plus 60 credits AA 2+2 design. AS to BS graduates at state universities averaged 151.6 credit hours. Many challenges that slow degree completion velocity cannot be fixed: sickness; family demands; jobs; military service; part-time schedules. Taking the wrong coursework that doesn't fulfill a student's bachelor's degree requirements can be fixed. The speediest, right route will boost completions and dramatically lower costs.

Fuel – There are hidden costs if students lack direction or velocity. Each additional semester, term or course costs students and donors. Post-completion employment income increases are lost. Less space is available for new students. Donor costs-per-degree rise. Fueling transfer direction and velocity updates & upgrades will boost completions.

Upgrading School to College/University to Career Counseling

Today in Florida, due to legislative, agency, sector, school district, college and university initiatives, students at universities, colleges, high schools, middle schools and even elementary schools are making earlier career and college credit course decisions. That's more than 5 million Florida students, making higher education decisions at different educational stages and charting different educational routes to their future. Wrong decisions waste student, school, college and university time and resources.
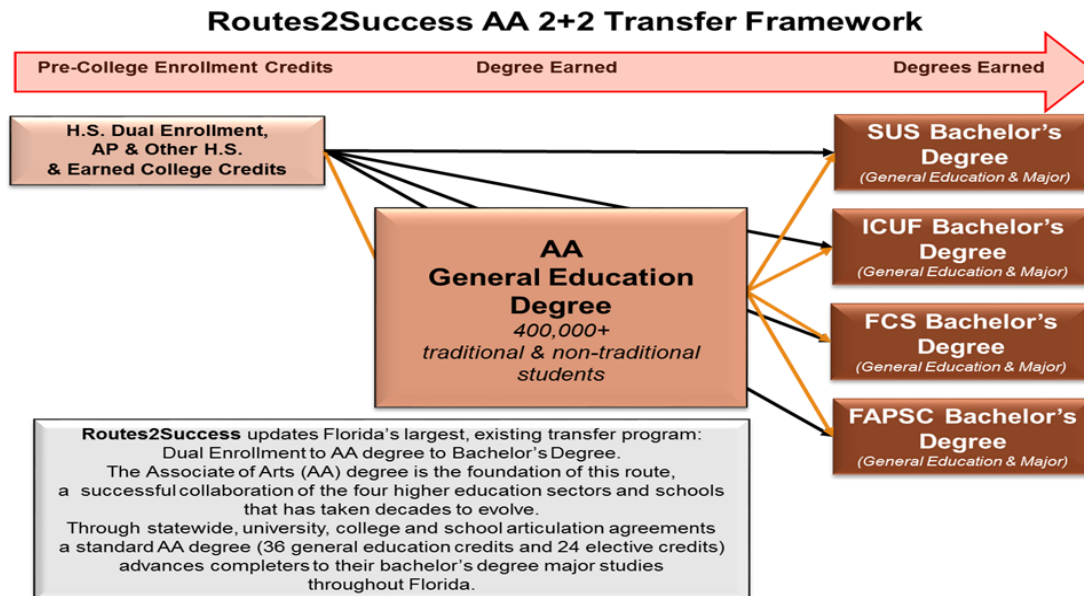
If each degree-seeking student sidesteps just one unneeded course, students, institutions and Florida would save public expenditures. Fewer than 3,000 public school counselors are advising around 2 million students on routes to school/college credit courses, colleges, universities, degrees and careers. College and university counselors are advising their students who have college credits from other schools, colleges and universities.

All school, college and university counselors are advising their students on complex and changing higher education requirements, courses, degrees, majors, institutions and careers, as well as handling a multitude of other non-academic assignments. Supporting school, college and university counselors (who are the primary expert contact on educational routes) is a high-priority assignment to help students make the right decisions to complete their bachelor's degree.

Recommendation 2.1: The HECC recommends that the Legislature provide for a professional development program for school, college university and one-stop center counselors that includes on-campus, on-site and on-line courses, modules and videos, as well as a statewide counselors' network that enables school, college, university and one-stop counselors to consult and advise each other on routes to degrees issues. Teachers could be induced to fulfill continuing education requirements by taking career counseling training and help counselors help students. Until such a professional development program is fully established school districts and postsecondary institutions should enact policies to ensure that both a secondary counselor and a post-secondary counselor are involved in advising students on dual enrollment and other acceleration mechanisms that award both high school and college credits to ensure students pick smart education routes.

Recommendation 2.2: Each higher education sector should work with higher education media, such as Florida NEXT to highlight and support their institutions' counselors and the services they provide to students and families.

Updating the AA 2+2 Transfer Route

Routes2Success AA 2+2 Transfer Framework

Pre-College Enrollment Credits Degree Earned Degrees Earned

H.S. Dual Enrollment, AP & Other H.S. & Earned College Credits

AA General Education Degree
400,000+ traditional & non-traditional students

SUS Bachelor's Degree
(General Education & Major)

ICUF Bachelor's Degree
(General Education & Major)

FCS Bachelor's Degree
(General Education & Major)

FAPSC Bachelor's Degree
(General Education & Major)

Routes2Success updates Florida's largest, existing transfer program: Dual Enrollment to AA degree to Bachelor's Degree. The Associate of Arts (AA) degree is the foundation of this route, a successful collaboration of the four higher education sectors and schools that has taken decades to evolve. Through statewide, university, college and school articulation agreements a standard AA degree (36 general education credits and 24 elective credits) advances completers to their bachelor's degree major studies throughout Florida.

1) Does Dual Enrollment Speed AA Completion?

> **Dual Enrollment Profile**
> The Florida College System has 50,000+ dual enrollment students taking AA or AS courses. State universities have 5,000+ dual enrollment students. School districts negotiate a payment to state colleges and universities that deliver courses. ICUF institutions may have dual agreement programs and have 6,000+ high school students in dual enrollment, early enrollment, summer camp, on-line and other college credit programs as recruitment strategies, many with discounted tuitions.
> HS students in dual enrollment programs can earn 30 college credits or more before graduating. FAPSC institutions are not allowed to have dual enrollment agreements with school districts but do offer high school students college credit course opportunities as recruitment and early-admission strategies.

Background

Statewide, high school students in Florida have a variety of options to earn both high school and college credits. These opportunities, known as Articulated Acceleration Mechanisms, include Dual Enrollment (DE), Advanced Placement (AP), the International Baccalaureate (IB), and Advanced International Certificate of Education (AICE). These are among the lowest-cost/college-credit options for an associate of arts or baccalaureate degree seeking student. The AP, IB, and AICE programs have standardized performance tests to ensure college level content mastery. DE courses do not.

The DE Program allows an eligible secondary or home education student with a 3.0 un-weighted grade point average (GPA) to enroll in a post-secondary course. Upon completion of a dual enrollment course, that student simultaneously receives high school and post-secondary course credits. Post-Secondary course credits earned prior to high school graduation could reduce time-to-degree and credits-to-degree, increasing the likelihood of completion of a post-secondary degree. Eligible students are permitted to enroll in dual enrollment courses conducted during and after school hours and during the summer term, on-campus or on-line.

The academic and economic advantages of these high school/college credit programs are obvious. At reduced cost to the student: they broaden the scope and depth of high school curricular options available to students; and they introduce high school students to college coursework. It is unclear, however if dual enrollment shortens the time-to-degree, reduce credit-to-degree or lower the costs of a bachelor's degree. Do they expedite completion or not?

A) Dual Enrollment Course Review

Legislation enacted in 2013 narrowed the General Education Core Curriculum. Those changes take effect this fall. This may mean that the courses included as options in dual enrollment agreements between schools and colleges/universities must be changed. A review of the impact of these forthcoming changes would be timely.

Additionally, some dual enrollment courses fulfill AA general course requirements but do not fulfill some limited-enrollment degree or prerequisite requirements. For example, a dual enrollment student who wants to pursue a bachelor's degree in engineering should take specific AA degree courses and electives. Otherwise they will complete their AA degree and then must complete additional required courses to enter an engineering program, making a 4 or 5 year program one year longer. A few state colleges have developed specific AA routes to some of these limited enrollment or prerequisite bachelor's degree programs.

Recommendation 2.3: The scope of dual enrollment courses (as well as other Acceleration Courses) should be reviewed by the Articulation Coordinating Committee to ensure that course options for students align with the college requirements of students' intended bachelor's degree routes, noting courses that fulfill required general education courses and those that would be electives. If a student hasn't decided a route, they should be alerted that their course selection should focus on basic general education requirements. This will save their AA degree electives until they determine their intended bachelor's degree major. That will enable them to use these elective options to fulfill prerequisite course requirements, save them time and lower their bachelor's degree costs.

B) Impact on Time-to-Degree Completion

The National Student Clearinghouse Research Center's latest report found more than one-third of first-time-in-college students in 2008 had transferred to a different institution by 2014. Almost half of those who had moved did so more than once. Such transferring students disappear from the federal IPEDS "First-Time-in-College" (FTIC) tracking system, making time-to-degree tracking of these students a complex and confusing challenge. Transferring also has effects on retention and graduation statistics.

The tracking of dual enrollment credits (as well as the other high school/college credits) is even more challenging. High school students have not applied, been accepted and been enrolled at a college or university as they earn these high school/college credits. They are transient students, not officially enrolled students of that institution for federal and state data collection purposes. Each Florida high school follows their students' progress, earning high school/college credits to complete their high school diplomas. Upon high school graduation, those students then scatter (with their "pre-college-enrollment" college credits) to hundreds of colleges and universities in Florida and the nation. They arrive at those colleges and universities (with their pre-college-enrollment college credits which may or may not apply to the degree that they are seeking) and their FTIC tracking starts. Adding to this data-tracking challenge, increasingly high school and

home school students are also earning transient student college credits on-line and on-campus that are not from high school/college credits programs. This course sampling (which is called "Swirl & Churn") by high school students, as well as other traditional and non-traditional students is a shopping-chart trend which is likely going to grow. Factoring in part-time and full-time student scheduling further complicates tracking time-to-degree reporting. Still the assumption is that dual enrollment (as well as the other high school/college credit programs) should speed students to their degree. How can that be determined? In 2009, OPPAGA surveyed nearly 9,000 students who had earned high school/college credits; 1,856 responded. Of those responders, only 40% said these courses allowed them to proceed through college in a shorter time period.

Recommendation 2.4: The HECC should work with the four higher education sectors (using their existing institutional bachelor's degree enrollment and degree completion data) to determine: 1) Where are students with dual enrollment and other high school acceleration college credits enrolling in associate or bachelor's degree programs?; and 2) Do students with dual enrollment and other high school acceleration college credits complete their bachelor's degrees with fewer total credits than students that do not have such pre-enrollment course credits?

C) PEPC 1997 Acceleration Mechanisms Update

In 1997, the Florida Postsecondary Education Planning Commission (PEPC) did an extensive review of these college credit acceleration mechanisms, including dual enrollment. Many of the PEPC recommendations are still relevant and still pending today.

Postsecondary Education Planning Commission 1997 Review of Acceleration Mechanisms Recommendations	2015 Status Update & Recommendations
1 - Articulation Agreement Guidelines should be used by all sectors and ACC should determine if guidelines are being consistently implemented	**Recommendation 2.5:** SUS and ICUF institutions should send copies of any dual enrollment agreements they have with school districts to the FLDOE, as well as any summary reports on college credits awarded so that FLDOE can better report on statewide dual enrollment outputs.
2 - Student participation should require 3.0 GPA for college credit – 2.0 for vocational certificates	In statute: eligibility for college-credit dual enrollment is an un-weighted 3.0 GPA; eligibility for non-college-credit career courses is an un-weighted 2.0 GPA. No need to recommend anything different.
3 - Courses should be limited to general education core courses and appropriate electives that will directly apply to a dual enrolled student's postsecondary degree/certificate	Covered in Recommendation 2.3: Dual Enrollment Courses Review.

4 - Joint dual enrollment and advanced placement instruction should be reviewed for clarity, intent and funding methodology	Joint AP and dual enrollment is no longer allowed in statute.
5 - Delivery of dual enrollment, advanced placement, International Baccalaureate to rural/remote high schools that request such courses should be a priority of distance learning initiatives	There are colleges and universities that offer online dual enrollment opportunities but school district and higher education institutions determine the extent and use of such options. **Recommendation 2.6:** Eligible nonpublic post-secondary institutions should consider offering on-line dual enrollment courses to rural school districts or rural educational consortiums that are a package of fixed-rate dual enrollment courses to be employed and facilitated in rural school districts.
6 – FLDOE should designate staff to assist and coordinate agreements	**Recommendation 2.7:** A Governor's Fellow should be enlisted to assist in promoting High School Dual Enrollment and other HS Acceleration Mechanisms, as well as their application toward bachelor's degree completion requirements.
7 – SUS & FCS should determine acceleration credit on degree completion	Covered in Recommendation 4: Impact on Time-to-Degree Completion.
8 – PEPC should determine acceleration credit impact on high school students' degree completion and time required to complete their degrees	Covered in Recommendation 4: Impact on Time-to-Degree Completion.
9 – Each participating college & university should review their program to ensure their compliance	Current compliance practice is expanded by Recommendation 5: SUS and ICUF adoption of dual enrollment articulation agreement elements for their programs with school districts.
10 – FLDOE should provide counselors, teachers, parents and students with all current policies	Current efforts are enhanced in Recommendations 1 and 2: Upgrading School to College/University to Career Counseling.
11 – An online system should provide students with each college & university's policies & procedures on the use of these acceleration credits.	Covered in Recommendations 11 & 12: Limited Enrollment and Prerequisite Requirements & GPS@FVC.
12 – FLDOE should work with the College Board on Advance Placement.	Advanced Placement examinations are outside the scope of this report.

13 – The Articulation Coordinating Committee should consider technical issues on how accelerated credits are earned, weighted, counted & funded.	Covered in Recommendations 3 & 4: Dual Enrollment Courses Review & Impact on Time-to-Degree Completion.
14 - 80% of advanced placement funds to advance placement	Advanced Placement funding is outside the scope of this report.
15 – Dual enrollment should be funded as a separate calculation within the Community College Program Fund	**Recommendation 2.8:** The Articulation Coordinating Committee should monitor annual dual enrollment by sector, district, delivery mode and course to determine trends in student participation.

2) Clarify & Promote Simple, Sure & Swift AA Routes to BS & BA Degrees, Jobs & Careers

> **Associate Degree Profile**
> - The Florida College System had 348,089 AA students in 2012-2013 and awarded 57,690 AA degrees.
> - At the Florida College System, the percentage of AA completers to total AA enrollment increased from 14% to 17%.
> - 2013-2014 AA enrollments: first- time-in-college 49,499 full-time/32,196 part-time and 10,448 full-time transfers and 13,538 part-time transfers.
> - ICUF Institutions have a smaller mix of AA and AS degrees, totaling 5,004 in 2013-2014 awarded by 13 institutions. Most of these degrees were, however, AS degrees.
> - FAPSC has 284 institutions that awarded 12,877 AA and AS degrees in 2013-2014.

Background

Sixty-five percent of Florida's high school graduates enroll in state colleges. Nationally, over 80% of community college students intend to earn at least a bachelor's degree but only about 25% end up pursuing a bachelor's degree and only 17% complete a bachelor's degree. Most community college students transfer to public institutions (72%), with smaller shares transferring to private non-profits (20%) and for-profits (8%). Those transferring to public 4-year institutions complete at a rate of 65%. Nearly two thirds of upper division students on state university campuses are transfer students from other colleges and universities. Those transferring to private non-profits complete at a rate of 60% and those transferring to a private for-profit complete at a rate of 35%.

Additionally, because bachelor's degree programs vary by major, many transferred credits do not apply toward a specific major. Addressing transfer inefficiencies and barriers requires considerable institutional commitment to change curriculum alignment, support services, information management and collaboration across two and four year institutions. These efforts, though significant, are worth the cost. Florida is ahead of most of the country but must do even better. Since Florida's population is again expanding, degrees are increasingly a career essential and bachelor's degree costs are substantial. It is imperative to move students along their degree route quickly. It's the best and immediate way to lower the cost of a bachelor's degree for students, families, colleges, universities and the State.

A) AA Production Inducements

Lowering the cost of higher education is a growing imperative. Lessening time spent getting a degree is a strategy that lowers degree costs. Supporting smart student choices and changing student behavior to make smart higher education choices earlier could lower the cost of bachelor's degrees for students, families, colleges, universities and Florida more than any other cost cutting strategy. The longer a college career lasts, the further off are increased earnings. Clear routes to a chosen degree, low-cost courses earned in high school, discounted summer on-campus/on-line courses, tuition scholarships & state support payments for degrees earned without excess credits are tools to expedite students towards degrees the simplest, surest and swiftest bachelor's degree route. Institutions should be encouraged and rewarded for AA degrees awarded swiftly. Substantially inducing AA degree production growth will boost and advance students, institutions and Florida's economy, yielding dividends to all. It will reduce student "college costs," college and university capacity shortfalls, and the State's cost-per-bachelor's degree awarded.

Recommendation 2.9: For the colleges and universities that award AA degrees to their Florida students, the Legislature should establish separate and substantial AA degree production growth inducements to reward: 1) Swift student AA degree completion; 2) AA degree production growth; and 3) AA degree production growth for any targeted bachelor's degrees. These targeted inducements will produce more AA degree outputs than other performance inducement designs.

Recommendation 2.10: In addition to production growth performance measurements and inducements for institutions, there should also be student inducements that reward students who complete their degrees swiftly. Current disincentives for slow-moving students include: FRAG and Able awards stop after 9 semesters and excess hours at the State University System have higher costs. The HECC recommends that the Legislature consider avenues that maximize and incentivize accelerated mechanisms toward AA completion and that maximize facility use, especially during non-peak hours. Institutions should be encouraged to develop course scheduling and scholarship opportunities that provide "Fast-Track" options for student to complete their degree.

B) Clarify & Promote AA Routes to Degrees, Jobs & Careers

Most bachelor's degree, upper division majors require applicants to have a customized AA degree with specific elective prerequisites to be considered for acceptance in that major program. Other limited-enrollment bachelor's degree, upper division majors likewise require specific AA courses.

Clarifying routes early would help high school and college students chart a route to their desired major, to their desired college/university and to their desired job/career swiftly. These limited-enrollment degree and prerequisite course requirements all already exist. They can be found, but not easily. They need to be more readily available and promoted. Students focus at varied times … or don't focus on making these choices until very late. Most students do not choose their major early; but the sooner they decide the better to chart their course. Planning sooner will save time and money.
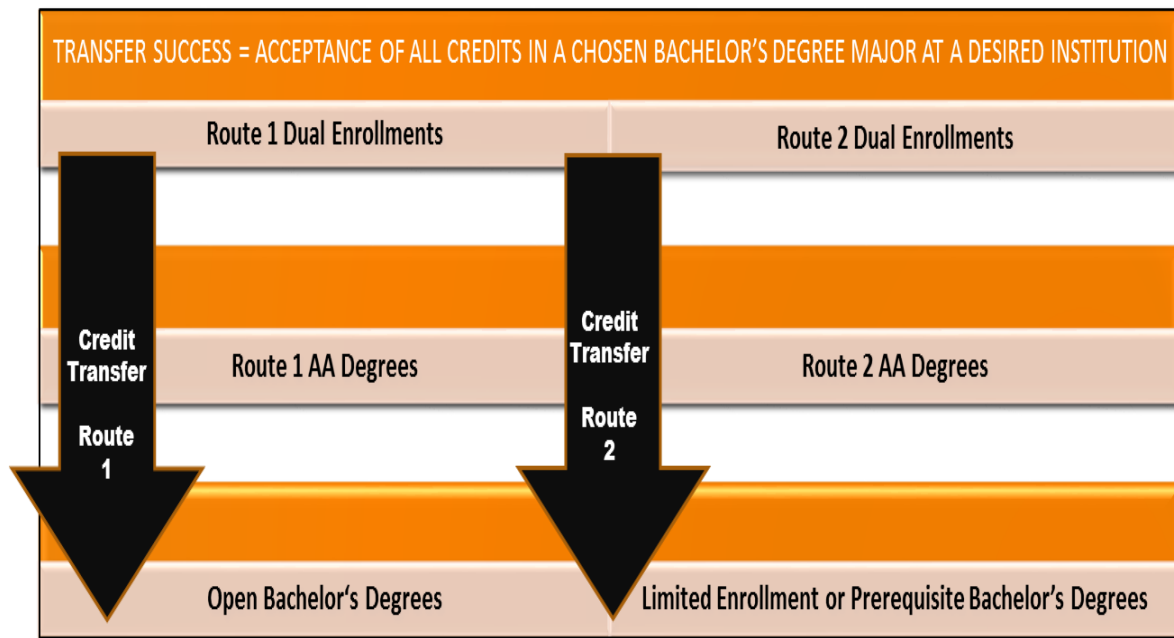
Recommendation 2.11: High school and college students should be alerted that randomly chosen courses may fulfill AA degree requirements but may not apply to the major they someday choose. Statewide bachelor's degree databases like the Florida Virtual Campus and other degree planning sites should highlight this information in their bachelor's degree major inventories. The four higher education sector websites, materials and databases should highlight this information in their degree major inventories, as well. Schools, colleges and universities should also be encouraged to highlight this information to their current and future potential students on their websites, in their counseling materials and through their counselors.

C) GPS@FLVC
Blending: (1) SOC to CIP researched data from FDEO and **TalentNet**; with (2) the **Florida Virtual Campus Website** of the University of West Florida (which includes KUDER, Career & Education Planning Systems); and (3) Routes 1 & 2 AA Transfer Clarification Data outlined on the previous page would provide students, parents and counselors with updated and upgraded resources for on-line and on-campus/on-site planning. It would enable high school, traditional and non-traditional students to pick a targeted profession from FDEO's 125 possibilities (SOC Codes); learn the bachelor's degrees (FLDOE CIP Codes) that qualify a degree completer for that profession; and know the AA courses required to qualify for enrollment at the colleges and universities that offer their targeted bachelor's degree major on-campus or on-line. Such on-line and on-campus/on-site systems for students, parents and high school, college and university counselors would promote efficient routes to bachelor's degrees, saving students time and money, freeing up space at colleges and universities and saving the state higher education funds.
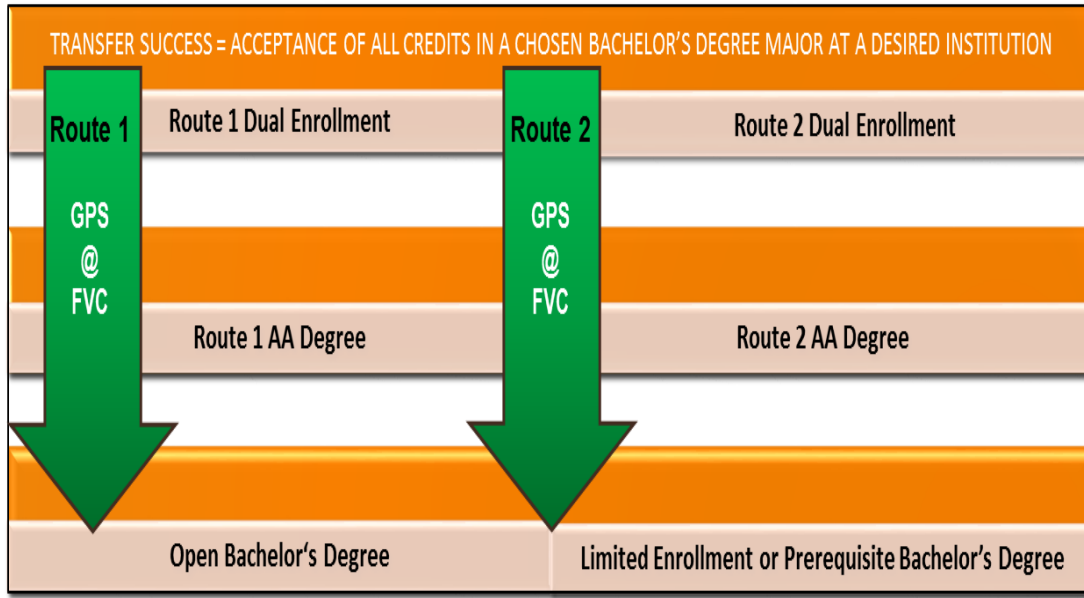
Recommendation 2.12: Discussions with Florida Virtual Campus and other degree planning sites should be launched to explore a GPS-like service for bachelor's degree-seeking students that charts a route to a chosen profession (SOC code) from bachelor's degree majors that qualify a graduate for that job (CIP codes) and then to Florida colleges and universities that award those majors on-line and on-campus/on-site. Such a Graduation Pathways Service (GPS) should highlight various best routes based on time-to-degree, cost reductions, inducements, helping students to determine their best route to a degree, as well as link to college and university career service offices, internship opportunities and fellowship programs Students should be informed and equipped to decide, "Where am I going?" "How long will it take me to get there?" "How much fuel will I need?"

3) Determine Sufficient Bachelor's Degree Completion Capacity

> **Post-Secondary Profile**
>
> **On-Campus & On-Site Locations – 366+**
> SUS - 42
> ICUF – 145
> FCS - 178
> **Bachelor's Degree Programs - 3,500+**
> **On-Line Bachelor's Degrees – 235+**
> SUS – 75
> ICUF – 134
> FCS – 26

Background

Upgrading college-credit programs for high school students is a manageable challenge, as is upgrading AA degrees production. Successful updating those AA 2+2 elements will increase bachelor's degree completion demand. If more high school students and more traditional and non-traditional students focus on their direction and swift velocity, the more vexing challenge is to provide sufficient bachelor's degree completion capacity for an increasing number of high school and AA students who will more deliberately and rapidly complete their courses and degrees during

the next 7 years. Examples of Florida's past degree capacity increase strategies are not stellar. After 15 years of teacher preparation programs, Florida is producing fewer teachers than 10 years ago. Florida still produces far too few BSN's based on demand for nurses. After a decade of STEM degree emphasis, Florida's percentage of STEM-degreed population is unchanged and remains the same as other comparable states and the nation.

Florida has existing proven on-line, on-campus and on-site capacity which can deliver the likely statewide growth of bachelor's degree completion demand. Based on forthcoming demand and supply growth, though, some under-served regions, particularly rural ones, may need additional capacity to deliver simple, sure and swift routes to bachelor's degree majors. Better projections are needed.

The Demand/Supply/Capacity Equation

Determining sufficient bachelor's degree completion capacity requires a three projections equation. Florida has done work to develop these projections, building both methodology to calculate these projections and to act on them. Additional work is needed. When this equation is calculated incorrectly, students, colleges, universities and Florida waste time and resources. Students earn supposedly high-demand degrees but can't find jobs. Colleges and universities expand the wrong programs. Florida pays more higher education costs but doesn't get more needed graduates for the workforce and economy.

DEMAND: Identifying demand of private sector, non-profit, federal, state and local government employers is tricky and often has unintended consequences. The best proven projections have come from growth trends of actual hiring that FETPIP developed when employment was growing. Even this methodology was unreliable during the recession when employment contracted.

SUPPLY: The national and international supply of bachelor's degreed individuals who move to Florida is largely unpredictable and not well tracked. The supply of bachelor's degree graduates in Florida comes more predictably from Florida state, independent and private colleges and universities, controlled by public, independent and private boards, under four varied higher education sector designs. Within Florida, these four higher education sectors supply bachelor's degree graduates through an array of on-line, on-campus and on-site programs. Their bachelor's degree supply of graduates scatters upon graduation throughout Florida, the nation and world. Many have already secured jobs; are looking for jobs elsewhere; are continuing their education; are serving in the military; and so on. These four sectors operate in an imperfect marketplace because of varied subsidies and tuition requirements and regulations. Increasing bachelor's degree production generally takes at least 2 years and more often longer. Immediate supply shortages, however, can be met through aggressive internship, summer employment, fellowship and recruitment of undergraduates in under-supplied degree majors who will soon complete their degrees.

CAPACITY: Longer term insufficient supply to meet demand will require either expanded capacity of the existing suppliers of bachelor's degrees or the creating of new supplier capacity. Since colleges and universities compete for students, some institutions are disinclined to disclose and detail their anticipated capacity expansion plans. When more students apply for a particular degree, they simply shift resources to provide expanded capacity for those students when the semester begins. Some regions simply have no current supplier and the only strategy is to create new capacity. And some students and locales can be difficult to reach effectively or efficiently with either strategy. Each ignores the actual national and global marketplace for employment.

Capacity Equation

> Demand/Employer Demand Projections
> (- Minus) Supply/Current Bachelor's Degree Production Growth Projections
> (+ Plus) Capacity/Current Capacity Expansion or New Capacity Creation Projections
> Sufficient Bachelor's Degree Completion Capacity

A) Current Supply System – On-Line

Florida has an extensive fully on-line bachelor's degree completion infrastructure that could be used by high school students, traditional students and non-traditional students to complete their bachelor's degrees and to respond to growing demand. Forty-one ICUF, FCS and SUS institutions deliver 235 bachelor's degree programs that can reach every motivated student in Florida with degree programs and counseling. And more FAPSC institutions deliver fully online bachelor's degrees, as well.   Because of Florida's Articulation Coordination infrastructure, most of these courses can transferred among most Florida institutions while other FAPSC on-line programs may pose a transfer challenge.

ICUF - 17 Institutions/134 Degrees	FCS - 17 Institutions/26 Degrees	SUS - 7 Institutions/ 75 Degrees	FAPSC - Institutions/Degrees
Adventist University of Health Sciences - 3	Daytona State College - 2	Florida International University - 17	List in Appendix
Barry University - 1	Florida State College at Jacksonville - 3	Florida State University - 7	
Bethune-Cookman University - 1	Palm Beach State College - 1	University of Central Florida - 15	
Embry-Riddle Aeronautical University - 7	Pasco-Hernando Community College - 2	University of Florida - 11	
Everglades University - 8	St. Petersburg College - 10	University of North Florida - 1	
Florida Institute of Technology - 11	State College of Florida, Manatee- Sarasota - 8	University of South Florida - 13	
Hodges University - 17		University of West Florida - 11	
Jacksonville University -1			
Keiser University - 23			
Lynn University - 3			
Nova Southeastern University - 20			
Palm Beach Atlantic University - 3			
Saint Leo University - 16			
Southeastern University - 7			
St. Thomas University - 4			
Warner University - 4			
Webber International University - 5			

Assembled from the Florida Virtual Campus & ICUF Annual On-Line Report

Recommendation 2.13: The Legislature should support statewide, higher education sector and college/university efforts to promote fully online bachelor's degree programs to high school, traditional and non-traditional AA students as an immediately available route to complete their bachelor's degree, especially in communities that do not have current on-campus or on-site bachelor's degree completion capacity. The Legislature should also support collaborations of state, independent and private colleges and universities: to maintain updated on-line degree inventories; to upgrade faculty on-line instructional skills; to broaden on-line access; to expand on-line student counseling, support and services; and to boost retention, swift degree completion and on-line degree production statewide.

B) Current Supply System – On-Campus/On-Site

Florida has a robust State University System with 42 main, branch and educational sites throughout the state. The Florida College System, one of the nation's largest with 175 campuses, serves every county in Florida. Florida's independent colleges and universities have 145 main campus, collaborative sites on state college campuses and satellite educational sites in 35 of Florida's 67 counties. And FAPSC has educational sites with bachelor's degree programs in 30 counties.

The bachelor's degree programs offered at all those on-campus, branch, collaborative and on-site locations are not fully inventoried anywhere for statewide planners and regional planners. The best current on-campus/on-site (but incomplete) inventory is TalentNet. Some institutions, however don't post their bachelor's degrees on the site. Some bachelor's degree programs are posted for main campuses but not for other on-site locations. It's unclear if collaborative sites and University Center bachelor's degree programs are included. For example, a fuller listing of bachelor's degrees offered (which may yet be incomplete) in the Escambia and Santa Rosa counties would include 25 additional ERAU STEM bachelor's degrees. There is no state funding support to sustain or maintain the TalentNet site, a generous gift from AT&T. It is left up to each sector to post updates to the site.   A fully updated, sustained and maintained site is needed to know actual statewide supply and project new capacity needs and the entire list of on-campus/on-site degree options should be promoted.

There have also been efforts to assemble inventories of all the bachelor's degree programs that are available both on-line and on-campus/on-site for counselors, students and parents. These inventories are not complete or for that matter utilized effectively, statewide, regionally or locally. This handicaps colleges, universities, counselors, students and parents. A full inventory of all the on-line, on-campus and on-site bachelor's degree programs for counselors, students and parents would be a positive step.

Recommendation 2.14: HECC recommends each higher education sector should provide TalentNet with a full and updated inventory of their on-campus and on-site bachelor's degree programs annually each Fall, noting if the bachelor's degree programs have limited enrollment or prerequisite course work requirements. This will enable both statewide and local degree production planning. This tool will be a critical tool to determine current on-campus and on-site bachelor's degree capacity statewide and locally. Because AT&T donated this exceptional database tool, it is already a bargain. The Legislature should now provide sustaining-maintenance funding to ensure its full capacity and utilization.

Recommendation 2.15: HECC should invite the Florida Virtual Campus to work with each higher education sector to promote its website and its online programs database to school, college and university counselors. Each higher education sector should provide the Florida Virtual Campus with a full and updated inventory of their on-line bachelor's degree programs, as well as links to on-campus and on-site bachelor's degree program inventories that it provides TalentNet annually each Fall, noting if the bachelor's degree programs have limited enrollment or prerequisite course work requirements.

State, independent and private colleges and universities have partnered to deliver on-site degrees. The longest established partnership is the University Partnership Center of St. Petersburg College (SPC). This Center delivers 28 bachelor's degree, 48 master's degree and 5 doctoral degree programs in Pinellas County. It includes: Barry University, Case Western Reserve University, Cleveland State University, Daytona State College, Eckerd College, Embry-Riddle Aeronautical

University, Florida Gulf Coast University, Florida Institute of Technology, Florida International University, Florida State University, National University of Health Sciences, Saint Leo University, the University of Florida, the University of South Florida, University of South Florida at St. Petersburg, University of South Florida at Sarasota/Manatee, and St. Petersburg College.

FCS-ICUF On-Site Collaborative Locations 11 State Colleges Partner with 6 ICUF institutions to deliver 210 on-site degree programs on State College Campuses	
State/Community College Names	Degree Level (AA, AS, BA, BS etc.)
Barry University - 12	
St. Petersburg College – 6	Masters & Masters of Public Administration
Tallahassee Community College - 6	Bachelors, Bachelors in Public Administration, Masters
Embry-Riddle Aeronautical University – 21	
Tallahassee Community College – 21	Certificate, Associate of Science, Bachelor's of Science, Masters,
Eckerd College - 6	
St. Petersburg College – 6	Bachelor's of Science, Bachelor's of Arts
Flagler College - 5	
Tallahassee Community College – 5	Bachelor's of Arts
Hodges University – 8	
Pasco-Hernando State College – 6	Bachelor's of Science, Masters
South Florida State College – 1	Bachelor's of Science
Florida Keys Community College – 1	Bachelor's of Science
Saint Leo University – 158	
College of Central Florida – 13	Bachelor's of Arts
Florida Gateway College – 16	Bachelor's of Arts
Lake-Sumter State College - 6	Bachelor's of Science, Bachelor's of Arts
North Florida Community College – 9	Bachelor's of Arts
Pasco/Hernando Community College – 39	Bachelor's of Science, Bachelors of Arts
Santa Fe College - 18	Masters, Bachelor's of Science, Bachelor's of Arts
St. John's River State College – 46	Bachelor's of Science, Bachelor's of Arts
St. Petersburg College – 4	Bachelor's of Arts
Tallahassee Community College – 6	Certificate, Bachelor's of Arts

Recommendation 2.16: The Legislature should establish a framework to support collaborative partnerships of district consortiums, colleges and universities to deliver college courses, associate's degrees, bachelor's degrees and graduate degrees at state college and community-based sites to enhance and expand higher education opportunities in communities that are higher education under-served and that have unmet demand.

C) Demand/Supply Statewide Consensus Projection

In 2012-2013, the State University System took the lead and created a statewide under-supplied, bachelor's degrees methodology and consensus to be used through 2020. The Access & Attainment Working Group included research and policy staff from the higher education sectors, Florida Department of Education (FLDOE) staff, Florida Department of Economic Opportunity (FLDEO) staff, Legislative staff and private sector employer groups staff. Projected employment demand developed by the Florida Department of Economic Opportunity was matched against bachelor's degree awards in Florida higher education sectors. In late 2013, the Commission on Higher Education Access and Educational Attainment reviewed and adopted the work group's methodology and consensus. The Commission issued its final report to the SUS Board of Governors

and other higher education sectors that confirmed the findings. The Commission had concluded that statewide the following 11 occupations would be under-supplied by anticipated bachelor's degree production of the higher education sectors unless current degree production was increased or new capacity created.

This project is a model that could be used to determine local demand and chronic unmet demand for teachers and nurses that are additional to the statewide occupations that have already been identified for increased production.

Occupations	Projected Annual Under-Supply
COMPUTER OCCUPATIONS	2,361
MIDDLE SCHOOL TEACHERS	1,024
ACCOUNTANTS & AUDITORS & FINANCIAL ANALYSTS	971
TRAINING & DEVELOPMENT SPECIALISTS	348
OPERATIONS RESEARCH ANALYSTS	217
KINDERGARTEN TEACHERS	210
INDUSTRIAL ENGINEERS	177
MEDICAL & CLINICAL LABORATORY TECHNOLOGISTS	169
INSURANCE UNDERWRITERS	132
CREDIT COUNSELORS	118
PUBLIC RELATIONS SPECIALISTS	116

Complete list available through the Commission on Access & Attainment Report

Recommendation 2.17: HECC should work with SUS and other higher education sectors to track the Commission on Access & Attainment's projections of under-supplied bachelor's degrees occupations to boost bachelor's degrees production to meet future demand. Working with FLDOE, FLDEO and private employer groups, HECC should monitor total bachelor's degree production of those occupations and should work with FETPIP to track hiring growth in those occupations to confirm the projected employment growth of those occupations materializes. In professions requiring licensure, including teachers and nurses, consideration should be given to tracking licensees coming to Florida with degrees or certifications granted by non-Florida institutions. Chronic unmet demand in Florida for teachers and nurses with bachelor's degrees should also monitored. HECC should report annually to the Legislature on the performance of this methodology's application and this higher education sector consensus on under-supplied degree programs.

D) Creating New Capacity – Online

Ten years from now, there will still be today's campus-based college and university systems but there should also be a coordinated digital-based college and university system. Any high school, traditional or non-traditional student in Florida would be able to choose an on-line route to a bachelor's degree and receive academic, administrative and social support to complete it.

Those students will be able to start their degree studies on-line in high school, advance their degree studies during the summer and complete their degree at home with support from local facilitators at local libraries, schools, colleges, universities or even Starbucks.

Many Florida colleges and universities are constructing and operating their own digital college or university already. The University of Central Florida records large numbers of its classroom

sessions for a digital system like the Florida Legislature's committee/session video system. Students can attend the classroom sessions, watch them live on their mobile phone/tablet or view them later from a video library. In a similar design, Lynn University is converting to digital textbooks and iPad study sessions for students, as well as digital lecture and instructor discussion sessions. Saint Leo University delivers blended classroom and digital courses to active duty military on bases. These blended sessions can be continued on-line when student/soldiers are deployed worldwide. Embry-Riddle Aeronautical University has more than 40,000 professional development students worldwide, taking on-line training courses with on-line and on-site student services centers for administrative, academic and social support.

Two years ago, Speaker Weatherford made it a priority to launch *Complete Florida* at the University of West Florida to deliver bachelor's degree completion programs on-line to non-traditional students. This UWF program has developed and demonstrated a new and innovative collaborative degree completion strategy for Florida. State and independent colleges and universities are coordinating degree completion programs, reaching students statewide with on-site support available, as well. The partnership includes Barry University, Florida Gulf Coast University, Florida International University, Florida State College at Jacksonville, Hodges University, Indian River State College, Palm Beach Atlantic University, St. Petersburg College, St. Thomas University, the University of Central Florida and the University of West Florida.

Recommendation 2.18: The Legislature should consider launching collaborative on-line programs for targeted traditional students similar to the University of West Florida's Complete Florida Plus program for non-traditional students. The program could begin with high school dual enrollment courses and continue to AA courses and bachelor's degree completion degrees offered by state universities, state college and independent and private colleges and universities.

E) Creating New Capacity – On-Campus/On-Site

Statewide and regionally, all bachelor's degree supply shortages cannot be met with an aggressive, on-line bachelor's degree strategy alone. Existing on-campus and on-site capacity will need to be fully and efficiently engaged, enlisted and employed.

As Florida's population rapidly grew during past decades, Florida has tried many different on-campus and on-site bachelor's degree capacity creation strategies, including branch campuses, collaborative on-site partnerships, University Centers, on-site educational locations and state college bachelor's degrees with various levels of success.

Unfortunately, some of these strategies have not increased total degree production. Some have simply shifted degree-seeking students from one supplier to another. Other strategies have produced duplicate degree programs in a region that splits the potential pool of students.

Recommendation 2.19: When the complete lists of on-line and on-campus/on-site bachelor's degree programs are completed statewide and for each of Florida's counties, HECC should convene a staff work group of the four higher education sectors to determine any projected shortfall statewide or regionally in supply for the Access and Attainment statewide projections of under-supplied bachelor's degree occupations. Determinations should be based on a benchmark academic year, the most recently completed academic year's production and most up-to-date production growth projections. The work group should report its findings to HECC along with recommendations that would solve those shortfalls.

F) Measuring Transfer Performance

Two commonly used performance measurements for colleges and universities are the federal IPEDS First-Time-in-College (FTIC) completions measures and Time-to-Degree measures. They are important but insufficient and deficient. They track a small proportion of the students seeking bachelor's degrees at colleges and universities, today. They measure best the cohorts of traditional, first time enrolled and attending a college or university fulltime. College credits earned in high school are not counted in the FTIC equation. These HS students have a head-start and should be finishing sooner than those students without high school/college credits.

In addition, transferring students disappear from a college or university's FTIC equation. That's 65% of the upper division students at Florida's state universities.   And part-time students are not going to match the time-to-degree velocity of full-time students, so comparing colleges and universities with primarily full-time students to those institutions with large part-time student enrollments yields incorrect institutional profiles. A more precise measure of every student's performance is the following equation that calculates every student's success, pursuing their bachelor's degree as efficiently was possible.

Transfer Routing Optimum Performance Measurement Goal

$$= \frac{A}{B} = \frac{1}{1}$$

where:

A STUDENT'S TOTAL COLLEGE CREDITS UPON DEGREE COMPLETION
HS Acceleration Mechanisms Credits + AA Credits + Major Credits

A COLLEGE OR UNIVERSITY'S BACHELOR'S DEGREE MAJOR
Required Credits to Earn that Degree

Recommendation 2.20: The Articulation Coordinating Committee should explore, working with college and university institutional research directors, the efficacy of a transfer student performance measurement to track transferring students' success completing their bachelor's degree. This new standard would serve in tandem with the IPEDS First-Time-In-College & Time-to-Degree Performance Measurement Standards to profile all upper division students on Florida's college and university campuses.
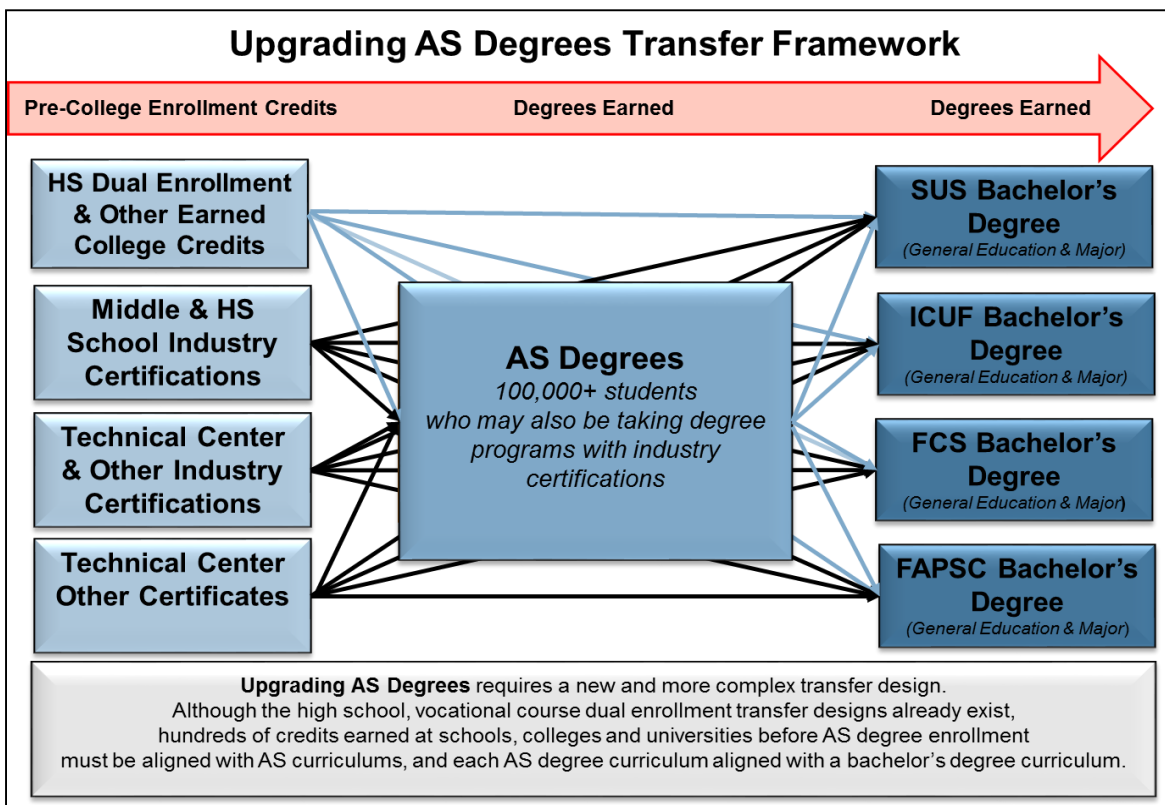
Upgrading AS Degrees

The Associate of Science (AS) Degree Program was also created 50 years ago when Florida Community College System was launched. Hundreds of AS Degrees were created as 60 credit "Terminal Degrees." AS Degrees were community college, workforce degrees. They were a simple, sure and swift employment route. The AA 2+2 Bachelor's Degree Program was more complex route that required transfer of a Associate of Arts Degree to a bachelor's degree program at a partner college or university.

AS degrees forego most of the 60 credit required general education and elective courses that precede bachelor's degree programs. Instead AS degrees require only 15 to 18 general education course credits. AS degrees focused instead on 42 to 45 course credits in a specific professional skill

for workplace employment. AS degree curriculums did not require an additional 60 course credit major at a bachelor's degree awarding college or university. AS degrees did not require a transfer of credits although college credits earned through dual enrollment could be transferred into an AS degree program. The 60 credit AS degree design and the 120 AA-to-bachelor's degree design were deliberately different options for students.

When Legislative action in 1971, upgraded the AA 2+2 bachelor's degree design and its infrastructure with a common course numbering system and model articulation agreements to promote and support transferring course credits, AS degrees were purposefully not included in the Legislation. In 1998, the Legislature did direct that model articulation agreements and common course numbering infrastructure be developed for AS degree transfer of credits to bachelor's degrees. In the past dozen years, this transfer infrastructure has been used by state, independent and private colleges and universities to enable AS degreed graduates to earn a bachelor's degree. AS degreed students take an additional 60 course credits of general education credits (15 to 18) and relevant upper division major course credits (45 – 42). Such AS degreed students take additional 60 credits of required AA general education courses and bachelor's degree major courses to fulfill a 120 credit bachelor's degree. Currently, many colleges and universities in Florida offer these AS-to-bachelor's degree upgrades for AS degreed students in criminal justice, nursing, technology and other fields.

Additionally in recent years, the AS degree transfer design has expanded with pre-enrollment college credits earned at schools, colleges, universities or centers. More than 200 industry certifications have been designed and developed for middle school, high school, technical center, and college and university students. Technical Center and State College Postsecondary Vocational Education Programs credits can now be transferred and included in AS degrees.

Upgrading AS Degrees Transfer Framework

Pre-College Enrollment Credits | Degrees Earned | Degrees Earned

HS Dual Enrollment & Other Earned College Credits

Middle & HS School Industry Certifications

Technical Center & Other Industry Certifications

Technical Center Other Certificates

AS Degrees
100,000+ students who may also be taking degree programs with industry certifications

SUS Bachelor's Degree
(General Education & Major)

ICUF Bachelor's Degree
(General Education & Major)

FCS Bachelor's Degree
(General Education & Major)

FAPSC Bachelor's Degree
(General Education & Major)

Upgrading AS Degrees requires a new and more complex transfer design.
Although the high school, vocational course dual enrollment transfer designs already exist,
hundreds of credits earned at schools, colleges and universities before AS degree enrollment
must be aligned with AS curriculums, and each AS degree curriculum aligned with a bachelor's degree curriculum.
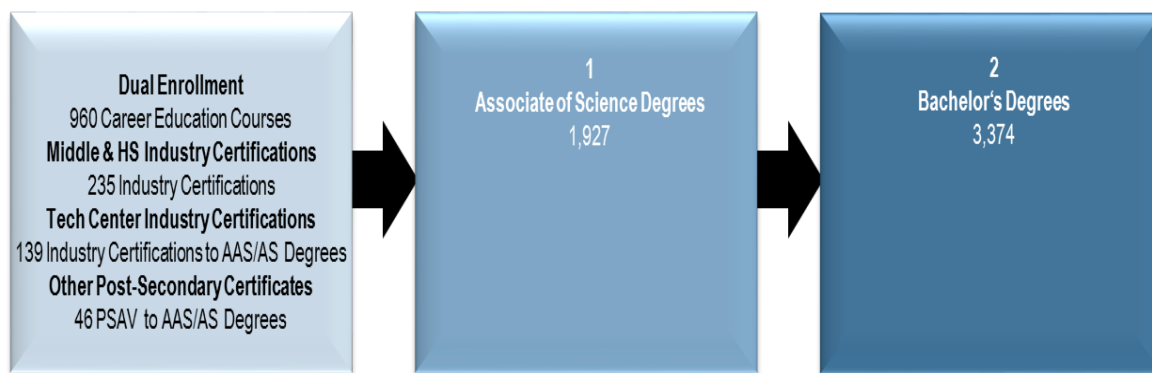
Upgrading AS degrees has two course credit crosswalk challenges. Each challenge is more complex than updating the existing AA 2+2 Program. There are far more courses, certificates, degrees and curriculums involved. There are more transfer college credits to incorporate into specific curriculums and degrees. While a few completed routes from pre-enrollment courses to AS degrees and to BS degrees have been constructed at colleges and universities, there is not statewide a system comparable to the AA 2+2 system.

1) Transferring Pre-AS-Enrollment Credits to a specific AS Degree Program While the general infrastructure currently exists to transfer these college credits to AS degree programs at state, independent or private colleges and universities, each pre-enrollment earned credit from schools, technical centers and elsewhere must be aligned to a specific college or university AS or BS curriculum and degree.

2) Transfer of AS Degree Credits to a specific Bachelor's Degree Program
Each AS Degree increasingly may become a package of pre-enrollment credits delivered by many educational institutions and a final AS degree awarding institution. Through statewide or individual reviews and articulation agreements, each of those AS degrees must be aligned to a specific available bachelor's degree that accepts that AS degree and its pre-AS enrollment credits.

Dual Enrollment
960 Career Education Courses
Middle & HS Industry Certifications
235 Industry Certifications
Tech Center Industry Certifications
139 Industry Certifications to AAS/AS Degrees
Other Post-Secondary Certificates
46 PSAV to AAS/AS Degrees

→

1
Associate of Science Degrees
1,927

→

2
Bachelor's Degrees
3,374

FLDOE & TalentNet Inventories

Challenging Implementation Steps & Recommendation

There are four challenging implementation steps to consider about upgrading AS degrees.

1. Every pre-AS-enrollment credit earned may not fulfill a student's chosen AS degree curriculum requirement. Every AS degree must be evaluated to determine the pre-AS-enrollment credits that can be applied to a specific associate degree.
2. AS degreed students may increasingly be enrolling in bachelor's degree programs and transferring those pre-AS-enrollment credits in their AS degree that may or may not apply to their chosen bachelor's degree major.
3. There may or may not be statewide or regional demand or interest sufficient to warrant an upgrade of every AS degree to a bachelor's degree program. The demand and interest in a specific AS to Bachelor's Degree should be determined, and
4. Statewide sector and institutional articulation agreements will have to be adopted for each set of pre-AS-enrollment course credits and each AS degree that will be transferred to a bachelor's degree program.

Recommendation 2.21: Coordination to determine priorities, to project demand, to determine capacity and to clarify transfer routing is needed to save students, school, colleges, universities and Florida time and money. The scope and scale of this project requires a dedicated project team of experts from the Articulation Coordination Committee, public and private K-20 education sectors and institutions, Florida employers, and the business community.

The HECC should convene such a group to continue and coordinate the work to specifically describe the strengths and weaknesses of Florida's A.S. degree design (and high demand, priority A.S. to B.S. articulation pathways) and recommend specific ways to enhance both as a means of improving economic development in the state. To the maximum extent practicable and optimally utilizing existing capacity fully before creating additional capacity, these recommendations should enable the Florida College System and the State University System to crosswalk A.S. degrees appropriate for transfer with appropriate B.S. degrees and design optimally efficient transfer parameters that ensure that requirements such as general education coursework and common prerequisites involving necessary professional courses can be completed within the degrees' normal timeframe. This review should also assess the value and role of industry certifications in A.S. degree design and A.S. to B.S. articulation and make appropriate recommendations.

The HECC should complete this work and provide draft legislation to the Governor and the Legislature in time for consideration during the 2017 Regular Legislative Session.

In its 2014 final report, the Higher Education Coordinating Council emphasized the need for collaboration between Florida's business community and the education system as a means of improving both. The 2015 Council furthered exploration of this concept by addressing two main issues: postsecondary student internships and K-12 teacher externships.

Postsecondary Student Internships

Overview

Internships are employment arrangements in which individuals (often students) lend their talents to employers in return for an "opportunity to develop business skills, learn about a new industry, and gain exposure to the work environment." [1] More specifically, under internships:

Interns can:[2]
- Gain work experience and transferable skills -- Students all have their educational experience in common. What stands out to employers is those students who also have work experiences by the time they graduate. This automatically makes them more marketable; as they may require less training and are assumed to be able to handle more responsibilities. In addition to the specialized skills of your field, transferable skills are generally required at any job, e.g. communication/interpersonal skills, computer proficiency, and team work.
- Possibly earn course credit -- Some degree programs incorporate a work opportunity into a requirement for graduation by giving course credit for the work experience. Other programs have an internship as an elective course for credit.
- Possibly earn money
- Be able to experience a prospective career path -- Most students enter college with an idea of a major or career path… and most students end up changing their minds. Exploring is a very important part of the academic process, and gaining a work experience is a great way for students to acquaint themselves with a field they are looking to learn about. By the time of graduation, the students have confidence that the degrees they are receiving are the right ones for them.
- Gain practical experience, by applying methods and theories learned in classes -- Many people learn best by being hands on. But everyone can benefit from seeing the things that they have been learning in class, put to action; whether it's in a chemistry research lab, a marketing development meeting, or a substance abuse counseling session.
- Network with professionals in their field, for references and future job opportunities -- It's all about who you know. Student interns are surrounded by professionals in the industry that they are seeking access to. It's more than just about getting a grade, earning credit, or making money. This is an opportunity for students to learn from everyone around them, ask questions, and impress them with their eagerness. These people can be their future colleagues or can be the connection to their first jobs.

---

[1] US Legal, Inc., *Internship Law & Legal Definition*, at http://definitions.uslegal.com/i/internship/ (last accessed October 2, 2015).

[2] The University of Arizona, *Benefits & Advantages of Internships and Other Related Experiences*, at https://www.career.arizona.edu/student/finding-an-internship/internships-and-other-related-experiences/benefits-advantages-of-internships-and-other-related-experiences (last accessed October 2, 2015).

- Develop new skills and refine others – Students can learn their strengths and weaknesses by creating learning objectives and receiving feedback from their supervisors. This is a unique learning opportunity that they may never have again. Interns can turn the mistakes that they make and the many things that they don't know into learning opportunities.
- Gain confidence in their abilities -- Practice makes perfect. If a student has learned about a specific technique in the classroom, they are able to test it out in the world of work. Then, they'll be much more equipped with the technique.

Employers can:[3]
1. Use internships as a cost-effective sourcing and recruiting strategy, including early identification of diverse entry level talent
2. Reduce new-hire turnover and build bench strength as the interns become acclimated to the company culture and processes throughout the internship
3. Capitalize on a flexible, cost-effective work force not requiring a long-term employer commitment
4. Use interns to bring new perspective to old problems
5. Enhance their image in the community by contributing expertise and resources to an educational enterprise

Both interns and employers can:[4]
- Develop a full-time, post-internship employment relationship. According to the National Association of Colleges and Employers, in 2014 nearly 60% of interns were offered full-time employment by their employers after completing their internships.

HECC Survey of Educational Institutions

In order to better understand the conditions currently underlying state internship programs, the HECC surveyed Florida's public colleges and universities.

State Colleges

Approximately 40% of state college programs indicated that there aren't enough internships available to their students. Reasons for this deficit include:

Relating to business:
- Colleges are located in regions (e.g., small, rural) lacking business partners and/or "appropriate" partners (e.g., small businesses without the ability to manage an intern).
- Mismatch of business internship offerings and student programmatic needs
- Administrative red tape (e.g., program paperwork, in-house administrative training, liability issues)

Relating to college:
- Not enough staff/resources to build an internship program, administer the program (e.g., student recruitment, matchmaking, screening employers), market the program (to students), and actively seek out business partners

---

[3] The Ohio State University, *Benefits of Internships*, at http://careers.osu.edu/employers/buckeye-internships/benefits-of-internships/ (last accessed October 2, 2015).
[4] National Association of Colleges and Employers, *Internship & Co-op Survey*, April 2015.

Relating to students:
- Lack of student response to available internship opportunities
- Timing mismatch between student needs (e.g., by semester) and available internships
- Reduced interning desire/capability of A.A. students who haven't started a major and whose elective credits are consumed by prerequisite requirements for baccalaureate program admission

State Universities

Four universities indicated that there are enough internships available to their students. Four universities indicated that there are not enough internships available to their students. Two universities did not indicate one way or another, and one university indicated that its decentralized approach to internships did not allow for reaching a conclusion. Reasons for this deficit include:

Relating to business:
- Universities located in regions lacking business partners and/or "appropriate" partners (e.g., small businesses without the ability to manage an intern)
- Administrative red tape (e.g., program development, in-house administration, legal issues)

Relating to college:
- Not enough staff/resources to administer an optimally-extensive internship program, including actively seeking out an optimal number of business partners

Relating to students:
- Students cannot financially afford to do an internship.
    - They have to decide between a paid job and an unpaid internship.
    - They have to pay for associated credits.
    - They have to pay for excess credits.
    - They have to pay for housing and/or transportation during the internship.
- Internships overlap with academic courses and/or interfere with on-time graduation course-planning.

HECC Survey of Employers

In order to better understand the internship needs of Florida businesses, the HECC surveyed Florida employers. Findings included:
- Approximately 80% of respondents annually hire interns. This is approximately 10 percentage points less that the respondents to the annual survey by the respected trade organization, National Association of Colleges and Employers (NACE). Approximately half of employers hire 1-5 interns annually, while approximately 10% hire 6-10 interns, 11-25 interns, and more than 50 interns annually, each.
- When asked the reasons why they hire interns, respondents cited "helps identify/groom our business's future workforce" more than 80% of the time. They also cited "helps with our business's workload," "helps with employee retention for those eventually hired," and "helps prepare today's youth for tomorrow's workforce" approximately 60% of the time. And, approximately 40% of the time, they cited "helps specific colleges/universities" and "helps the community."

- Approximately 40% of respondents indicated that their intern use would be increasing, while just over half of respondents indicated that their intern use would be remaining about the same.
- Approximately two-thirds of respondents provide internships of a semester in length. About 30% of internships are for 4-6 weeks in duration, and about 20% last a year.
- Nearly all respondents provide internships during the summer, while about 40% provide internships at other times of the year.
- In terms of duties that their interns perform, nearly three-quarters of respondents reported "research and analysis," while more than 60% reported "job shadowing." About a third reported "general office work," while a quarter reported both "communications" and company-specific tasks. These results appear consistent with NACE's finding that interns spend more time on "analytical/problem solving" than anything else, about a fifth of their time on "communications," and only about 10% of their time on "administrative/clerical" activities.
- Nearly all respondents pay their interns – a national trend and assumption made by the NACE survey.[5] Approximately two-thirds of respondents pay their interns so that their business may directly benefit from the intern's work, and about 60% of respondents pay their interns wages as a motivational tool. That said, two-thirds of respondents provide other types of "compensation" to their interns:

Benefit	FL Survey	NACE Survey
Scholarships	8%	5%
Housing assistance for those who relocate	28%	49%
Time worked as an intern can accumulate and apply toward benefits if turned into a full-time job	24%	32%
Employee after graduation	84%	44%-90%
Paid holidays (if already receiving compensation)	24%	68%
Medical and/or dental benefits	0%	15-17%
Vacation time	4%	23%

Nearly 70% of respondents use "manager/mentor evaluation" to evaluate the success of their internship programs. Approximately 40% evaluate their programs by "how many interns are converted to employees," "performance ratings," and "student evaluations/exit interviews."

---

[5] The decision to pay an intern may be related to the U.S. Department of Labor's six strict criteria for identifying a learner/trainee who may be unpaid:

- The training, even though it includes actual operation of the employer's facilities, is similar to training that would be given in a vocational school.
- The training is for the benefit of the student.
- The student does not displace regular employees, but works under the close observation of a regular employee.
- The employer provides the training and derives no immediate advantage from the activities of the student. Occasionally, the operations may actually be impeded by the training.
- The student is not necessarily entitled to a job at the conclusion of the training period.
- The employer and the student understand that the student is not entitled to wages for the time spent training.

Just over half of respondents reported that they hire their interns "often." This appears comparable to the NACE finding of employers "converting" a little over half their interns. Additionally, approximately one-third of respondents to the Florida survey hire their interns "sometimes," and about 15% hire them "always."

Respondents were asked to indicate barriers to their businesses providing more college-level student internships in the future. Responses were as follows:

Barrier	% Responding
We don't have enough resources to manage interns.	51%
"Information Mismatch" Issues (unduplicated)	43%
• There is often a mismatch between the types of students available (e.g., program of study) and the types of work that our business does.	23%
• We are unfamiliar with available college/university internship programs.	20%
• There aren't enough interested students to fill our available internship positions.	17%
• We don't know how to find students to intern at our business.	17%
Available students aren't usually skilled enough to perform our business's internship duties.	14%
Other (e.g., workload, specialty of work)	14%
Colleges/universities don't adequately vet students who apply for internships.	6%
There is too much red tape involved in participating in colleges' and universities' internship programs.	6%
There are too many legal/liability concerns with hosting internship programs.	6%
Interns don't help our business's bottom-line.	3%

While the primary barrier appears to be lack of employer resources to manage interns, more than 40% of respondents indicated that one or more types of information mismatch hinder their ability to hire more interns.

Discussion

After reviewing the survey data and other relevant research, the HECC concluded that the matching of Florida's college and university students with businesses looking for interns needs to be more effective. More specifically, there is not a central, statewide marketplace for Florida-based internships akin to central employment marketplaces, such as Monster.

This means, for example, that internships are currently tied to campuses rather than the students who might live there only part of the year. Many students return home for the summer, the time when most internships are available.

Although, over the course of several months, the HECC researched possible solutions and heard from several experts regarding existing internship marketplace systems, it became evident that there isn't one silver bullet technology for immediately resolving the situation. For example:

- Career services offices around the state use different career services software. A preliminary information search by Florida ExpertNet found the following:[6]

Institution	TDN (Orbis Communications)	NACE Link or Symplicity	CSO Research	CSIT-TEAM	CCN (College Central Network)	Other
FIU	X	X		X		
UM	X					X
FSU		X				
UCF		X		X		
UF		X				
FAMU			X			
FAU			X			
UNF			X			
USF			X	X		
UWF			X			
FIT			X			
FGCU					X	X
FPU						X
NC					X	
Some State Colleges					X	

   Moreover, many faculty and career services offices are understandably competitive and territorial when it comes to developing relationships with intern-offering businesses and sharing those opportunities with only "their" students.
- Florida ExpertNet (http://expertnet.org/index.cfm?fuseaction=home.home): This is a statewide portal of applied research expertise in Florida's universities. Although it doesn't currently collect internship data, it does work with the universities to maintain a one-stop shop of experts, funded research projects, centers and institutes, technology licensing opportunities, speakers, and instructional programs.
- CareerSource Florida's Employ Florida Marketplace (https://www.employflorida.com/vosnet/Default.aspx): This is the state's one-stop online resource for job listings, education opportunities, training opportunities, and career-building assistance. Although the Employ Florida Marketplace enables searching for internships, relatively few have been posted.
- Tampa Bay Intern (https://tampabayintern.com/): A partnership of CareerSource Tampa Bay and CareerSource Pinellas, this site is designed to connect employers and those seeking internship opportunities in both Pinellas and Hillsborough counties. Potential interns are

---

[6] Florida ExpertNet, "Business Portal Information," *Presentation before the Higher Education Coordinating Council*, July 8, 2015.

eligible if they are nearing the end of their educational program/certification or have successfully completed it within the last 6 months.

- Talent Development Network (http://home.tdnmiami.com/index.html): The One Community One Goal, Talent Development Network matches Miami's local students with internships at major employers in fast-growing career fields, such as aviation, creative design, hospitality and tourism, banking and finance, information technology, life sciences and healthcare, trade and logistics. Partners include: The Beacon Council (Miami-Dade County's official economic development partnership) and the following educational institutions: Barry University, Florida International University, Florida Memorial University, Miami Dade College, Miami-Dade County Public Schools, St. Thomas University, and the University of Miami.

- Florida Consortium of Metropolitan Research Universities (http://www.csit-team.org/internship-opportunities/): As part of its Board of Governors TEAm Grant award, the Consortium (University of Central Florida, University of South Florida, Florida International University) has developed a one-stop shop for internships relating to its information technology degree programs. Consortium students can apply for paid internship opportunities in Orlando, Tampa, and Miami. Even though each institution uses different career services software, the common internships portal uploads data from each institution's career center or office of experiential learning.

- National Solutions: Internships.com is the "world's largest internship marketplace" bringing students, employers, and postsecondary institutions together in one centralized location. Internships can be listed and found by several factors, including geography, timing, subject-matter, and company. Florida "partners" include the University of Florida and New College of Florida.

- Other states: Other states have developed or are developing statewide internship portals, including:
  - Nebraska Department of Economic Development (http://neded.org/business/talent-a-innovation-initiative/internne) – This website runs parallel to institutions' career centers, with students and businesses interacting directly with the website.
  - Intern In Michigan (http://interninmichigan.com/) – This is a private-sector solution. Unlike traditional online job boards which essentially act as electronic "classified ads," Intern In Michigan is a dynamic matching system that connects internship seekers and employers based on skills, interests, and requirements. Using correlated question-sets and matching algorithms, Intern In Michigan sifts through thousands of employers and potential interns to find the best possible matches in a matter of seconds. Employers are matched with only the most qualified candidates while potential interns get matched to the opportunities that best fit their unique profiles.
  - New Mexico – On September 8, 2015, Governor Susana Martinez directed state agencies to create an online "Students Work" internship portal that will connect New Mexico college students with employers through a wide range of internship offerings.

Recommendations

3.1 The HECC recommends to the Governor and the Legislature that there be one common website listing all student internships relating to the State University System and Florida College System. Career centers and all other relevant offices at SUS and FCS institutions shall provide student and employer access to their internships listings via the website.

Private postsecondary institutions in Florida shall be encouraged to provide student and employer access to their internships listings via the website. Employers shall be encouraged to post internship listings directly on the website.

At a minimum, internship listings shall be searchable by degree program and geographic location. The website shall also enable students to communicate directly with employers and post profiles that can be searched and found by employers seeking interns.

3.2 The HECC recommends to the Governor and the Legislature that the State University System and the Florida College System be required to annually report, by institution, the number of students who were placed in internships by their career centers and completed those internships.

K-12 Teacher Externships

Overview[7]

A teacher extern spends time in a non-school workplace to learn directly about trends, skill requirements, and opportunities in industries related to their teaching field in order to enrich and strengthen their teaching and bring relevance to student learning. Externships range from a day of job shadowing to longer externships that are often project-based and can last as long as a full summer. More specifically, under teacher externships:

Externs can:[8]
- Collaborate with company employees on developing relevant curriculum that result in innovative approaches to subject matter delivery
- Gain experience, knowledge, insight, and skills to take back to the classroom for increased motivational and contextual learning
- Develop business contacts who could be future mentors for students and educators
- Gain a more comprehensive view of the business world while engaging in meaningful assignments
- Learn new answers to the student question, "Why do we have to learn this?"
- Work in conjunction with businesses to increase the competitiveness of the 21st century

Employers can:[9]
- Work with teachers to impact and strengthen the 21st century workforce
- Benefit from working with educated problem solvers
- Positively impact the job readiness and workforce development in the community
- Directly assist with educational curriculum reform, the raising of academic standards, and the improvement of student achievement
- Obtain assistance and new perspectives on business projects

HECC Survey of School Districts

---

[7] University of California at Berkeley, College and Career Academy Support Network, *Teacher Externship Guide*, 2010.

[8] Rhode Island Federation of Teachers and Health Professionals, *Teacher Externship Initiative*, at http://rifthp.mayfirst.org/node/59 (last accessed October 8, 2015).

[9] Rhode Island Federation of Teachers and Health Professionals, *Teacher Externship Initiative*, at http://rifthp.mayfirst.org/node/59 (last accessed October 8, 2015).

In order to better understand the conditions currently underlying teacher externship programs, the HECC surveyed Florida's school districts.

There was an 87% response rate with 12 school districts indicating that they offer teacher externship programs, ranging from a day to a month in duration. Those districts were Alachua, Clay, Collier, Columbia, Duval, Holmes, Lake, Marion, Palm Beach, Polk, Seminole, and St. Johns.

Lessons Learned

In summary, the benefits of teacher externship programs were:
- Teachers: Teachers better understand the industry and real-life skills they need to implement in the classroom.
- Students: Students get exposure to current practices in businesses and skills in problem-solving.
- Districts: Business partnerships

Overwhelmingly, districts indicated that there are too few externship opportunities for their teachers. Most-cited reasons include:
- Not enough business partners willing to offer teacher externships
  - Not enough appropriate business partners in small and/or rural counties
- Not enough staff time or expertise to design, market (internally), and implement/administer (e.g., find business partners, sign formal agreements, evaluate programs/participants) a formal teacher externship program
- Not enough funding
  - Many of the funding issues revolved around the need to pay teachers while they participate in externships (typically during the summer), though in some programs (e.g., Palm Beach) employers compensated the teachers.
  - A few districts responded that funding would be needed to pay for substitute teachers to take to place of teachers who are participating in teacher externships.

HECC Survey of Employers

In order to better understand the externship needs of Florida businesses, the HECC surveyed Florida employers.

Only approximately 15% of respondents reported that they provide teacher externships. Thus, there were not enough responses to draw conclusions from the descriptive data.

However, respondents were also asked to indicate barriers to their businesses providing more teacher externships in the future. Responses were as follows:

Barrier	% Responding
We are unfamiliar with available teacher externship programs.	53%
We don't know how to find teachers to extern at our business.	28%
We don't have enough resources to manage externs.	22%
Available teachers aren't usually skilled enough to perform our business's externship duties.	16%
Externs don't help our business's bottom-line.	13%

There is often a mismatch between the types of teachers available (e.g., subject-matter taught) and the types of work that our business does.	13%
There aren't enough interested teachers to fill our available externship positions.	9%
There are too many legal/liability concerns with hosting externship programs.	6%
Schools/school districts don't adequately vet teachers who apply for externships.	0%
There is too much red tape involved in participating in teacher externship programs.	0%

Thus, it appears that information mismatch issues are the primary barrier to businesses hiring more teacher externs.

Recommendations

3.3 The HECC recommends that the aforementioned internship website also serve as a common website listing all teacher externships relating to Florida's public school districts. District human resource offices and all other relevant school district offices shall provide student and employer access to their externship listings via the website, and at a minimum, externship listings shall be searchable by subject. Private elementary and secondary institutions in Florida shall be encouraged to provide teacher and employer access to their externships listings via the website. Employers shall be encouraged to post externship listings directly on the website.

3.4 The HECC recommends to the Governor and the Legislature that the Department of Education be required to annually report, by school district, the number of educators who were placed in, and completed, private-sector teacher externships.

2015 Priority Area #4: Continue to align, prioritize and incentivize education funding to better meet Florida's industry talent needs through the use of the best available labor market intelligence and industry data.

A 2013 study by Gallup found that only 11% of business leaders say they are confident that college graduates are well prepared for the workplace, while a full 96% of chief academic officers of colleges and universities report being somewhat or very confident that they are preparing students for success in the workplace.

Whether this is a misperception, a skills gap issue, a lack of sufficient quantity of available skilled workers, or a systemic misalignment between curriculum developed and deployed compared to abilities required within the marketplace, the Higher Education Coordinating Council agrees it is an issue that must be addressed to ensure Florida's continued and growing competitiveness in the global economy.

In fact, to begin addressing this issue, the Higher Education Coordinating Council unanimously approved a motion on March 27, 2015 stating the following: *We, the Higher Education Coordinating Council (HECC), agree that decisions should be informed by market data. Once CareerSource Florida has reached its goal of having a beta version of the Market Intelligence Portal (expected by July 1, 2015), the HECC members will each identify and commission team members who will work with CareerSource Florida to build toward a HECC-endorsed methodology into the Portal.*

Subsequently at its October 6, 2015 session, a majority of HECC members approved the language for recommendations 4.1 and 4.2. Therefore, it is the recommendation of the Higher Education Coordinating Council that the Legislature consider acting upon each of the following recommendations:

Recommendation 4.1: All higher education entities represented through the Higher Education Coordinating Council using state appropriated funds must explain, beginning July 1, 2016, how they consulted and utilized market data and business intelligence to enhance decision-making about curriculum, programs and work experience. This demonstrated use of market data and business intelligence must be included within the report each entity submits to the Governor, Senate President and Speaker of the House on an annual basis with a copy provided to the Higher Education Coordinating Council. If an entity does not currently provide an annual report, then it must prepare and distribute the required market data utilization information in a stand-alone report to the Governor, Senate President and Speaker of the House on an annual basis with a copy provided to the Higher Education Coordinating Council.

Recommendation 4.2: The Office of Economic & Demographic Research shall convene and lead monthly data meetings beginning no later than April 1, 2016 among all HECC-member entities, the Florida Department of Economic Opportunity and the Florida Education and Training Placement Information Program (FETPIP) to:
- o Identify data available to all participating entities;
- o Identify new data requirements;
- o Seek data-sharing opportunities among participating entities;
- o Pinpoint existing policies or data-collection processes that create unnecessary barriers to enhanced data sharing and analyses; and
- o Identify the skilled trades present and forecasted in the Florida economy.

These monthly data meetings will culminate in a report, due to the Higher Education Coordinating Council by September 16, 2016, recommending:
- o   A single supply/demand methodology for all Higher Education Coordinating Council entities that benchmarks forecast production of talent; and
- o   Any policy or legislative changes necessary to fully leverage and utilize market demand-driven data to enhance decision-making about curriculum, programs and work experience.

The Higher Education Coordinating Council will either accept the report in full prepared by The Office of Economic & Demographic Research or make modifications to the recommendations prior to sending its annual report to the Legislature.

Recommendation 4.2.1:   The Office of Economic & Demographic Research (EDR) is designated as the appropriate entity to convene and lead regularly scheduled data meetings among HECC-member entities; the Florida Department of Economic Opportunity; Bureau of Labor Market Statistics (LMS); the Florida Department of Education, Florida Education and Training Placement Information Program (FETPIP); and other parties to:
- •   Identify data available to all participating entities;
- •   Identify new data requirements and standards;
- •   Identify data-sharing opportunities among participating entities; and
- •   Identify barriers to data sharing and analyses and potential solutions.

Collectively, the participants to the regularly scheduled meetings shall be referred to as the "labor market data, tools, and uses group."

Minutes from the meetings shall be kept and posted on EDR's website. The minutes shall document any decisions, follow-up, and action steps that occurred from the meetings.

The Higher Education Coordinating Council (HECC) may elect to include the meeting minutes, a summary of the meetings, and an explanation of the model described in 4.2.2 in its annual report to the Legislature.

Recommendation 4.2.2: The HECC recognizes that EDR is currently working with House and Senate staff to evaluate a changed role for the Workforce Estimating Conference. Under EDR's proposal, a dynamic model that offers a more comprehensive view of the labor market will be developed. Business demand and labor supply would be separately modeled and key assumptions and potential gaps/critical areas of concern would be adopted by the revised conference. This would ensure a consistent forecasting framework for state planning and budgeting purposes.

EDR will use the regularly scheduled meetings of the "labor market data, tools, and uses group" to seek participants' input into the design phase of the model and to test external user acceptance. EDR will work with the group with a target completion date of no later than October 31, 2016. EDR will attempt to ensure that the new model and forecasting process meets the needs of the group participants. HECC endorses the use of the "labor market data, tools, and uses group" to help EDR design and test a new model for labor market estimating.