

# CAREER PATHWAYS AND TECH EXPRESS TO VALENCIA STRATEGIC IMPACT REPORT JUNE 30, 2016 TO JULY 31, 2017

The following report reflects the impact that the Career Pathways and Tech Express partnerships have had on the community, secondary and postsecondary students, and Valencia College.

**VALENCIA**COLLEGE

Career Pathways

**TECH  
EXPRESS** TO

**VALENCIA**COLLEGE

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# Career Pathways Department



**VICKI FINE, MANAGER CAREER PATHWAYS**



**ROB STROBBE,  
CAREER PATHWAYS  
DATA MANAGEMENT SPECIALIST**



**KAILYN WILLIAMS,  
CAREER PATHWAYS SPECIALIST**



**ANITA GENTZ,  
TECH EXPRESS  
ADVISOR**



**FRANCISCO PEREZ,  
TECH EXPRESS  
ADVISOR**



**LISA BLISS,  
TECH EXPRESS  
ADVISOR**

## Executive Summary

In 2016-2017, Valencia's Career Pathways department grew in size and scope to include connecting with students completing programs at technical colleges. To accommodate the expanded focus, the Career Pathways department is now comprised of two teams. The Career Pathways team consists of one Career Pathways Specialist and one Career Pathways Data Management Specialist. The Tech Express to Valencia team consists of three Tech Express (TE) advisors each assigned to Orange Technical College (OTC) and Technical Education Center Osceola (TECO) campuses. The Career Pathways Manager is responsible for the guidance, direction and focus of both teams and reports to the Assistant Vice President (AVP) of Career and Workforce Education (CWE). While each team is responsible for creating awareness of and accessibility to pathways for students to earn credit provided by articulation agreements, the Career Pathways partnership has been in existence for over 25 years and Tech Express to Valencia is a new partnership begun in fall 2016.

The mission of each team is to offer accelerated pathways to Valencia from high schools for Career Pathways and from OTC for Tech Express, which supports the Workforce and Education pillar of Valencia's five-year impact plan. The purpose of each team is to maintain existing pathways, develop new pathways and facilitate the award of credit process for students. Tech Express articulations are technical agreements reviewed and approved each year by Valencia and the school districts that articulate "bundles" of 3-27 credits for students who complete articulated programs at OTC. Career Pathways is the more traditional path that articulates high school program courses to Valencia courses for award of credit. In both agreement types, students are eligible to receive credit by assessment but must enroll and take a course at Valencia to receive credit. Career Pathways does not presently require students to declare the articulated program at Valencia to receive credit, but this is a requirement for the technical agreements supported by Tech Express.

## Career Pathways

The Carl D. Perkins grant supports the work of Career Pathways through career and technical education pathways developed around 17 designated national career clusters (Figure 1). Orange County Public Schools (OCPS), the School District of Osceola County (SDOC), and Valencia College signed an Inter-Institutional Agreement in 1992 that formed a consortium to develop pathways to technical careers. Today, the consortium offers 24 articulated pathways in 20 Career and Technical Education (CTE) programs (Figure 4) that provide students with opportunities to transition from articulated secondary programs to postsecondary education in technical college, Valencia College and/or baccalaureate programs.



Over the years, consistent communication between Valencia and the school districts has fostered collaborative relationships. This year the consortium met on eight occasions between November 2016 and June 2017, including the biennial Career

Pathways Program Review on March 8, 2017 (*pictured left*). Approximately 100 consortium members attended the program review event to share updates, lunch and review existing or develop new agreements in CTE programs. The new and updated agreements allow students to earn credit at Valencia by participating in joint assessments developed for certificate and A.S. degree programs.

In addition to reviewing and updating existing articulations, another exciting outcome of the meeting is the potential for developing ten new articulation agreements in 2017-2018 (Figure 5).

Changes in secondary or postsecondary curriculum or input from employer advisory boards may be cause for updating or developing new programs of study. Education and employer partnerships are central to forming the workforce development programs needed to prepare current and future employees. For several decades, advisory committees have played a valuable role in developing and maintaining programs to meet the needs of employers. The program of study articulations agreed upon by the consortium and its business and industry partners encourage secondary students to become engaged in technical, A.S. degree or certificate programs that prepare them for high-skill, high wage occupations.



Students who participate in the Career Pathways program get a head start on both a career path and a college degree. Career Pathways credits serve to complete a program requirement in an articulated A.S. degree and/or college credit certificate, or possibly meet an elective requirement in an A.A. degree. Valencia and school districts with whom we have articulation agreements have historically collaborated on the exchange of student information that enables tracking and reporting Career Pathways data and timely communication with students. In addition to the protection of minor's information afforded under FERPA, this year Valencia entered into a non-disclosure agreement with OCPS to re-affirm our commitment to protecting all Career Pathways student information. Because Career Pathways data collection, compilation and reporting does not begin until the conclusion of the current school year, data reported for assessments lags one year behind the reporting year. Consequently, data presently reported is from the end of the 2016 school year and includes a three-year comparison for reference (Figures 6-22).

An interesting trend in the three-year data from 2014, 2015, and 2016 is the decreasing pass rate at OCPS (Figure 6). A comparison of the OCPS data between 2014 and 2015 indicates an increase in 2015 of 2,065 or 31 percent in the number of students taking assessments, but a decrease of 24 percent in the pass rate. The Career Pathways office believes the increase in students assessing in 2015 is because 2014-2015 is the first year that OCPS course final exams (CFE)—taken by all students in a given course—were available as an assessment modality. A comparison between 2015 and 2016 indicates a decrease in 2016 of 1,194 or 22 percent in the number of students assessing, but a slight increase in pass rate of 51 percent. The trend that data appears to support is that while more students are assessing since 2013-2014, the pass rate has declined. Most articulations require a minimum score of 70 percent on the assessment for award of credit. We will be interested to see if the pass rate continues to increase and by how much in 2017-2018.

In summary of the 2015-2016 assessment year, 3,432 students passed at least one Career Pathways assessment earning 13,319 credits—potentially saving our community \$1,372,656. To date in 2017, Valencia's Career Pathways department has awarded 5,100 credits to 1,301 students for a savings of \$525,606. (Please note that a student may assess in more than one Career Pathways program of study and because students have 24 months to claim Career Pathways credits, data for each year includes students who may have graduated within the last two years.) Since the Consortium's inception in 1995, Career Pathways has awarded 95,938 credits to 22,862 students for a total savings of \$7,054,628.

## Tech Express to Valencia



Tech Express to Valencia is an innovative expansion of the existing partnership between Orange County and Valencia. This partnership, launched in November 2016, was two-years in the making. Although logistical set-up and training took place from November to December 2016, today, Valencia has three full-time advisors who are now familiar faces on all of the technical campuses. Over the last six months, OTC staff and

administrators have experienced the dedication of these individuals through their commitment to the partnership. More importantly, technical college students benefit from their passion and ability to engage and transition students along the path to education and career advancement in ever-increasing numbers.

One intent of this exciting initiative is to increase awareness and understanding of the opportunities available to technical college students. Students completing one of the 48 articulated programs at OTC are eligible to earn college credits at Valencia once they pass the approved assessment and complete one course in the articulated program linked to their technical college program. TE advisors are strategically located on each campus to engage in outreach activities and communications that encourage tech program graduates to consider the credit opportunities in Valencia's career and technical degree programs. Not only does accessibility to TE advisors increase awareness of the articulated programs, but advisors also help students transition to Valencia by assisting with applications and documentation for award of credit.



From January 1 to June 30, 2017, TE advisors engaged in and tracked interactions with students. In January 2017, the AVP of CWE set the goal to double enrollment from OTC. The standard set was to achieve 25 successful interactions by the end of the academic year. Successful interactions are those that result in graduating students completing applications and/or documentation for award of credit that prepares the student for transitioning to Valencia. Successful interactions are a direct result of communication with students—either individually through office visits, classroom visits, emails and phone calls or in groups through events and presentations. In the second quarter, TE advisors successfully

interacted with 64 students, which is a 77% increase over the number of application and documentation assists in first quarter. By the end of the academic year, the TE advisors far exceeded expectations by assisting 79 students with applications and/or documentation for award of credit—over three times the designated goal. TE advisors made contact with 2,979 students in the second quarter and 2,429 students in the first quarter for a cumulative 5,408 student contacts. We anticipate that as we continue to review and analyze data collected each quarter, our ability to project, plan and strategize will improve.

Additionally, TE advisors connect with key partners through meetings and presentations that build their campus relationships. In the second quarter, TE advisors interacted with 366 instructors and administrators on the OTC campuses. These interactions include articulation meetings, meetings with OTC faculty and guidance counselors, graduation ceremonies, and focus groups intended to provide information and answer questions regarding articulations.

To grow and strengthen the partnership the Career Pathways Manager and AVP of CWE regularly collaborate with internal and external stakeholders in developing tools and resources that will build on the momentum. We are currently working with OCPS leadership on a system for data transfer similar to that used for Career Pathways student information. Access to OTC graduate data will enable advisors to communicate the benefits of articulations to all students who graduated within the last three years from one of the 48 articulated OTC programs listed below. This data will also allow us to track the number of OTC students who enroll and/or complete Valencia programs.

<b>Orange Technical College PSAV Program</b>	<b>Valencia College A.S. Degree Program</b>
Accounting Operations	Office Administration
Accounting Operations	Accounting Technology
Administrative Office Specialist	Office Administration
Advanced Automotive Technology	Supervision & Management for Industry
Air Conditioning, Refrigeration & Heating	Building Construction Technology or Supervision & Management for Industry
Automotive Collision Repair & Refinishing	Supervision & Management for Industry
Automotive Service Technology	Supervision & Management for Industry
Barbering	Supervision & Management for Industry
Building Construction Technologies	Building Construction Technology
Building Maintenance Apprenticeship	Supervision & Management for Industry
Brick & Block Masonry Apprenticeship	Supervision & Management for Industry
Commercial Foods & Culinary Arts	Culinary Management
Computer Systems & Information Tech.	Network Engineering Technology
Cosmetology	Supervision & Management for Industry
Dental Assisting	Dental Hygiene
Diesel Technology	Supervision & Management for Industry
Digital Audio Production	Sound & Music Technology
Digital Media/Multimedia Design	Graphic & Interactive Design
Digital Photography Technology	Supervision & Management for Industry
Digital Video Production	Digital Media Technology
Drafting	Drafting & Design Technology
Early Childhood Education (CDA)	Early Childhood Education A.A.
Electrical Apprenticeship	Supervision & Management for Industry
Electrician Apprenticeship	Supervision & Management for Industry
Electricity	Building Construction Technology
Electronic Technology	Electronics Engineering Technology
EMT	Emergency Medical Services
EMT	Fire Science Technology
Fashion Technology & Production Services	Supervision & Management for Industry
Fire Sprinkler Systems Apprenticeship	Supervision & Management for Industry
Game/Simulation/Animation – Programming	Computer Programming and Analysis
Game/Simulation/Animation – Programming	Computer Information Technology

<b>Orange Technical College PSAV Program</b>	<b>Valencia College A.S. Degree Program</b>
Game/Simulation/Animation – Visual Design	Digital Media Technology
Game/Simulation/Animation – Audio/Video Effects	Digital Media Technology
Hotel & Resort Business Management	Hospitality & Tourism Management
Industrial Pipefitter Apprenticeship	Supervision & Management for Industry
Interior Decorating Services	Supervision & Management for Industry
Machining Technologies	Supervision & Management for Industry
Mechanical Apprenticeship	Supervision & Management for Industry
Medical Administrative Specialist	Medical Office Administration
Medical Assisting	Medical Office Administration
Medical Coder/Biller	Health Information Technology
Medical Laboratory Assisting	Biotechnology Laboratory Sciences
Medical Records Transcribing	Medical Office Administration
Network Systems Administration	Network Engineering Technology
Practical Nursing (LPN)	Nursing, Advanced Standing Track
Plumbing Technology Apprenticeship	Supervision & Management for Industry
Sport, Recreation & Entertainment Marketing	Business Administration
Structural Steel Apprenticeship	Supervision & Management for Industry
Web Development	Computer Programming and Analysis
Web Development	Computer Information Technology
Welding (Applied Welding Technologies)	Supervision & Management for Industry

In addition to collaborating with OCPS, we are also working with Marketing and Strategic Communications at Valencia to finalize the design concept for Tech Express. Currently, TE advisors are polling students and instructors on their campuses to get reactions to the concepts. Preliminary feedback indicates that the concepts are engaging, and we are confident that the final message and graphics will make Tech Express to Valencia a recognized name. Once finalized, we are ready to move forward with print materials and digital media marketing.



***Offering Valencia courses to complement the OTC Surgical Tech program on Orange Campus is one of the programs under consideration.***

The second intent of this initiative is especially innovative as Valencia and OCPS OTC collaborate to make the connection stronger. We are currently researching and exploring opportunities to make advancing career and education more convenient for technical college students. We plan to achieve this goal by identifying programs (A.S. or CCC) on each OTC campus that could fit into the specific learning environment on that campus. Offering Valencia courses at OTC allows students to continue their education in a familiar and convenient environment, and strengthens and expands the partnership's commitment to students.

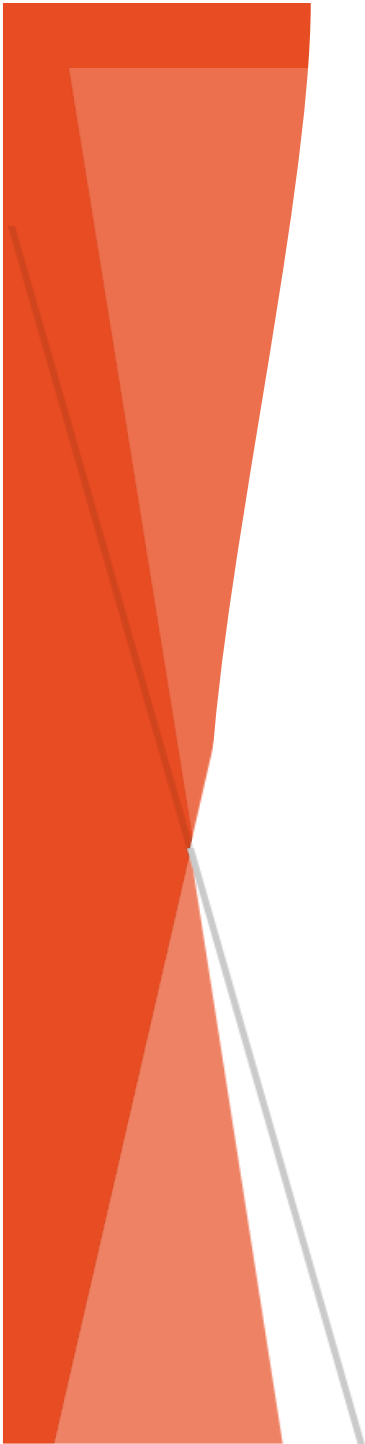
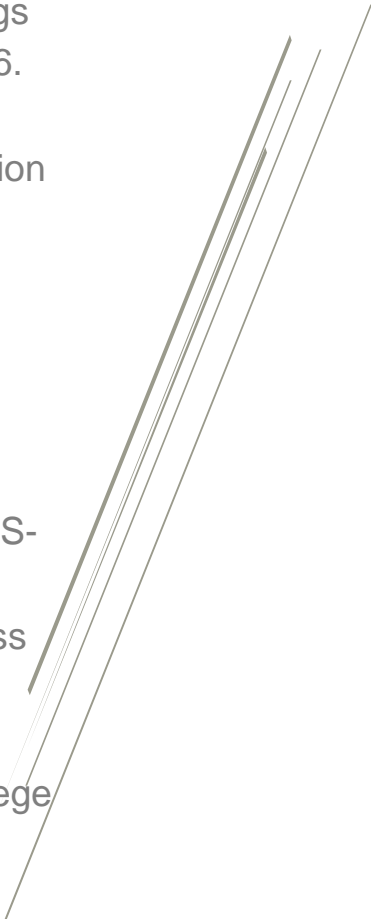
The outcomes of all of these collaborations will continue to build on the success of Tech Express to Valencia, and we are looking forward to another exciting year.



## Highlights from 2016-2017

Both Career Pathways and Tech Express had a productive year in 2016-2017. The 2016-2017 year in review highlights the major accomplishments achieved by the Career Pathways Department.

### The year in review...highlights from 2016-2017

- 
- Biennial Career Pathways Program Review brought 100 members of the consortium together to collaborate and share updates.
  - Ten potential new programs of study identified for articulation.
  - To date in 2017, Career Pathways awarded 5,100 credits to 1,301 students for a savings to the community of \$525,606.
  - Career Pathways mailed approximately 6,400 notification letters in June.
  - Three TE advisors hired by Valencia and deployed to Orange Technical College campuses—a new employee model for Valencia and an added dimension to the OCPS-Valencia partnership.
  - Expectations for Tech Express exceeded by 50 percent.
  - Tech Express advisors transitioned 79 technical college students to Valencia.
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**SECTION ONE  
CAREER PATHWAYS IMPACT**

**VALENCIA COLLEGE**

**Career Pathways**

## History of Career Pathways - Building on the Tech Prep Model

During the reauthorization of the Carl D. Perkins Vocational and Applied Technology Education Act in 1990, the U.S. Congress made significant changes in career and technical education (CTE) by creating “Tech Prep” to fund innovative secondary-postsecondary partnerships that would improve the academic proficiency of technical students and facilitate student transition from secondary to postsecondary institutions through articulation agreements. Over 900 partnerships (Tech Prep consortia) of secondary and postsecondary institutions and employers collaborated to create thousands of articulation agreements<sup>1</sup>. In 1992, in order to provide this opportunity for students in Orange and Osceola Counties, Valencia Community College signed an Inter-Institutional Agreement with Orange County Public Schools (OCPS) and Osceola District Schools (now called the School District of Osceola County or SDOC), and the Orange-Osceola-Valencia Tech Prep consortium was



created. It is important to note that the Orange-Osceola-Valencia consortium (hereinafter called the consortium) has long been considered a successful model for Tech Prep in Florida and is used as an example in Dan Hull’s book, *Career Pathways Education with a Purpose*. Many of Valencia’s data tracking, analysis, and reporting processes discussed in Mr. Hull’s book were the foundation for data collection and reporting from Valencia’s Career Pathways department today.

On August 12, 2006, President George W. Bush signed the Carl D. Perkins Career and Technical Education Act into law. The purpose of the new act was to provide an increased focus on academic achievement of career and technical education students, strengthen the connections between secondary and postsecondary education, and improve state and local accountability. The new law included major areas of revision such as using the term “career and technical education” instead of “vocational education;” maintaining the Tech Prep program as a separate federal funding stream within the legislation; and developing “programs of study” that link academic and technical content across secondary and postsecondary education.<sup>2</sup>

Although Career Pathways has evolved to take on many different forms over the past several decades, the introduction of the *Program of Study* (POS) provides the framework to support a general expectation that high quality CTE would be delivered using a seamless educational path from secondary to postsecondary that reflects economic and workforce development priorities. The design of the POS framework is to help students successfully navigate the Career Pathways system.<sup>3</sup> Today, the POS is an integral part of the communication and information that the consortium shares with students. Consortium members review and update POS frameworks every year to ensure that secondary, PSAV, and postsecondary information is accurate and up-to-date. An example of a POS framework used in the 2017-2018 Perkins RFA, is the Culinary Arts POS in Appendix A. All of Valencia’s Career Pathways frameworks are found on the Career Pathways website and provide a map to guide students and parents to the potential pathways and award of credit opportunities from CTE secondary courses to postsecondary programs.

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<sup>1</sup> Hull, Dan, *Career Pathways Education with a Purpose*, CORD, 2005.

<sup>2</sup> U.S. Department of Education, Carl D. Perkins Career and Technical Education Act of 2006, <https://www2.ed.gov/policy/sectech/leg/perkins/index.html>

<sup>3</sup> Joint publication of the Center for Occupational Research and Development (CORD) and the National Association of State Directors of Career Technical Education Consortium (NASDCTEc), *The Career Pathways Effect*, CORD, October 2015.

## Career Pathways Defined

In 2003, the U.S. Department of Education's Office of Vocational and Adult Education (OVAE) sponsored an initiative designed to identify working models for a successful Tech Prep consortia. Through this initiative, the Center for Occupational Research and Development (CORD) discovered that there were no ideal models, and so a clearer definition emerged as to what an ideal Career Pathway should include. In early 2004, CORD developed the following description of the term Career Pathways that still serves today:

"A coherent, articulated sequence of rigorous academic and career/technical courses, commencing in the ninth grade leading to an associate degree, baccalaureate degree and beyond, an industry-recognized certificate and/or licensure. The Career Pathway is developed, implemented, and maintained in partnership among secondary and postsecondary education, business, and employers. Career Pathways are available to all students, including adult learners, and lead to rewarding careers in any of the career clusters."<sup>4</sup>

Career Pathways has designated career clusters, and there are multiple career pathways within each career cluster. These clusters have evolved and changed over time and today there are 17 career clusters as shown in Figure 1.

<b>In Career Pathways, CTE Programs are aligned to one of these career clusters:</b>	
Agriculture, Food & Natural Resources	Government & Public Administration
Architecture & Construction	Health Science
Arts, A/V Technology & Communication	Hospitality & Tourism
Business, Management, & Administration	Human Services
Education & Training	Information Technology
Energy	Law, Public Safety & Security
Engineering & Technology Education	Manufacturing
Finance	Marketing, Sales & Service
	Transportation, Distribution & Logistics

**Figure 1: Career Pathways Career Clusters**

## Career Pathways Purpose and Mission

As high schools continue to move to the forefront of education reform, policymakers and practitioners from the national to the local levels are working to improve student achievement, high school graduation rates, and career and college prospects for graduating high school students. If high school students are to be career and college ready, CTE needs to be an active participant in education reform and policymaking.

While Career Pathways offers purpose and structure for the student, it is important that these pathways also provide relevant classroom teaching and motivate student learning. In 1992, the consortium began working to build pathways for students. With the increased focus in the last decade on students enrolled in CTE, efforts to form secondary and postsecondary partnerships and develop relationships with business and industry partners have intensified, but the mission behind

<sup>4</sup> Hull, Dan, *Career Pathways Education with a Purpose*.

these efforts has never wavered. The consortium and its business partners focus on the same activities and with the same intent on the local level as is promoted on the national level:

- Aligning secondary and postsecondary courses
- Setting standards at secondary and postsecondary education levels based on employer input
- Providing opportunities for students to earn college credit while still in high school
- Providing career development activities to foster career maturity.<sup>5</sup>

### Creating Pathways for Academic Growth

Career Pathways mission is to develop more fully the academic, career and technical skills of secondary education students and postsecondary education students who elect to enroll in career and technical education programs. State and local efforts continue to build on achieving these goals by: 1) developing challenging academic and technical standards that prepare students for high skill, high wage, or high demand occupations; 2) linking secondary and postsecondary education for career and technical students; and 3) supporting secondary, postsecondary, local workforce boards, and business and industry partnerships.<sup>6</sup>

In secondary and postsecondary institutions, as well as in industry, each partner is responsible for fulfilling their purpose to ensure that Career Pathways is successful.

The purpose and mission of the secondary pathway is to:

- Meet state academic standards and grade-level expectations.
- Meet high school testing and exit requirements.
- Meet postsecondary (college) entry/placement requirements.
- Provide foundational knowledge and skills in a chosen career cluster.
- Provide opportunities for students to earn college credit through dual /concurrent enrollment or articulation agreements.<sup>7</sup>

The purpose and mission of the postsecondary pathway is to provide:

- Opportunities for students to earn college credit through dual/concurrent enrollment or articulation agreements.
- Alignment and articulation with baccalaureate programs.
- Industry-recognized skills and knowledge in the chosen career cluster.
- Opportunities for placement in the chosen career cluster at multiple exit points.<sup>8</sup>

Pathway partners ensure that empirical evidence is maintained by:

- Regularly collecting qualitative and quantitative data.
- Using data for planning and decision-making for continuous pathway improvement.
- Ongoing dialogue among secondary, postsecondary and business partners.<sup>9</sup>

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<sup>5</sup> Joint publication of the Center for Occupational Research and Development (CORD) and the National Association of State Directors of Career Technical Education Consortium (NASDCTEc), *The Career Pathways Effect*, CORD, October 2015.

<sup>6</sup> Hull, Dan, *Career Pathways Education with a Purpose*.

<sup>7</sup> Hull, Dan, *Career Pathways Education with a Purpose*.

<sup>8</sup> Hull, Dan, *Career Pathways Education with a Purpose*.

<sup>9</sup> Hull, Dan, *Career Pathways Education with a Purpose*.

## Current Trends in Educational Attainment



Between 1995 and 2015, educational attainment rates among 25- to 29-year olds increased. The percentage who had received at least a high school diploma or its equivalent increased from 87 to 91 percent, with most of the change occurring between 2005 and 2015. The percentage who had completed an associate's or higher degree increased from 33 percent in 1995 to 46 percent in 2015. While data from the National Center for Education Statistics indicates that about 59 percent of students who began seeking a bachelor degree at a 4-year institution in fall 2009 completed that degree within 6 years, of those enrolled at 4-year institutions with open admission policies, only 32 percent completed the degree within 6 years. Furthermore, approximately 29 percent of those who enrolled in community colleges in fall 2009 obtained associate degrees within three years.<sup>10</sup>

## Creating Pathways for Economic Growth and Increased Potential Earnings

Unfortunately, not everyone has the means to go directly from high school to college. Many experience delays and must work to pay their college expenses. Some lack motivation or are not prepared to attend postsecondary education. However, studies have shown that economic growth and increased potential earnings are directly linked to postsecondary education.<sup>11</sup>

### High School Jobs

Studies indicate that opportunities for employment with only a high school diploma still exist and will continue to do so, but in dwindling numbers and with lower earnings potential. By 2018 these jobs are expected to drop to just 37 percent and only one-third of these positions is expected to meet the "minimum earnings threshold" (MET). Most of these jobs will be in hospitality or tourism (27 percent); transportation, distribution, and logistics (13 percent); architecture and construction (11 percent) and manufacturing (9 percent).<sup>12</sup>

### Middle-Skill Jobs (some college; associate degrees or technical certificate)

More than half of the workers with associate degrees or better will earn above the MET, and typically, at a lesser expense than obtaining a four-year education. Many of these jobs offer job security and opportunities for advancement in such careers as health care; commercial construction; manufacturing; business, management, and administration.<sup>13</sup>

### High-Skill Jobs (Bachelor's or higher)

Almost 70 percent of workers with bachelor's degrees will earn above the MET; over 80 percent of those with graduate-level credentials will earn above the MET. Essentially every job category is open to employees with bachelor's degrees or higher.<sup>14</sup>

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<sup>10</sup> National Center for Education Statistics Fast Facts, <https://nces.ed.gov/fastfacts/display.asp?id=27>

<sup>11</sup> CORD and NASDCTEc, *The Career Pathways Effect*.

<sup>12</sup> CORD and NASDCTEc, *The Career Pathways Effect*.

<sup>13</sup> CORD and NASDCTEc, *The Career Pathways Effect*.

<sup>14</sup> CORD and NASDCTEc, *The Career Pathways Effect*.

Research by Valencia's Career and Workforce Education division supports the studies performed by CORD and NASDCTEc showing the link between increased potential earnings and postsecondary education as shown in Figures 2 and 3.

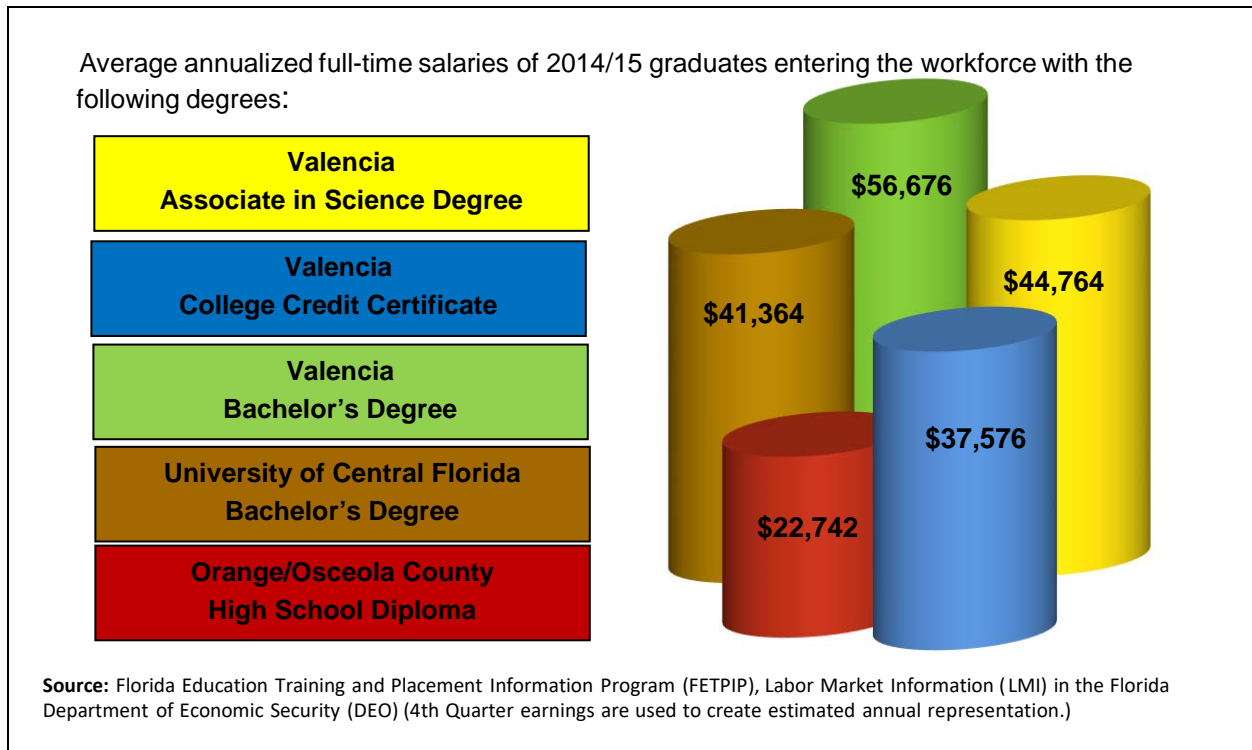


Figure 2: Average annualized full-time salaries of 2014-2015 graduates entering the workforce.

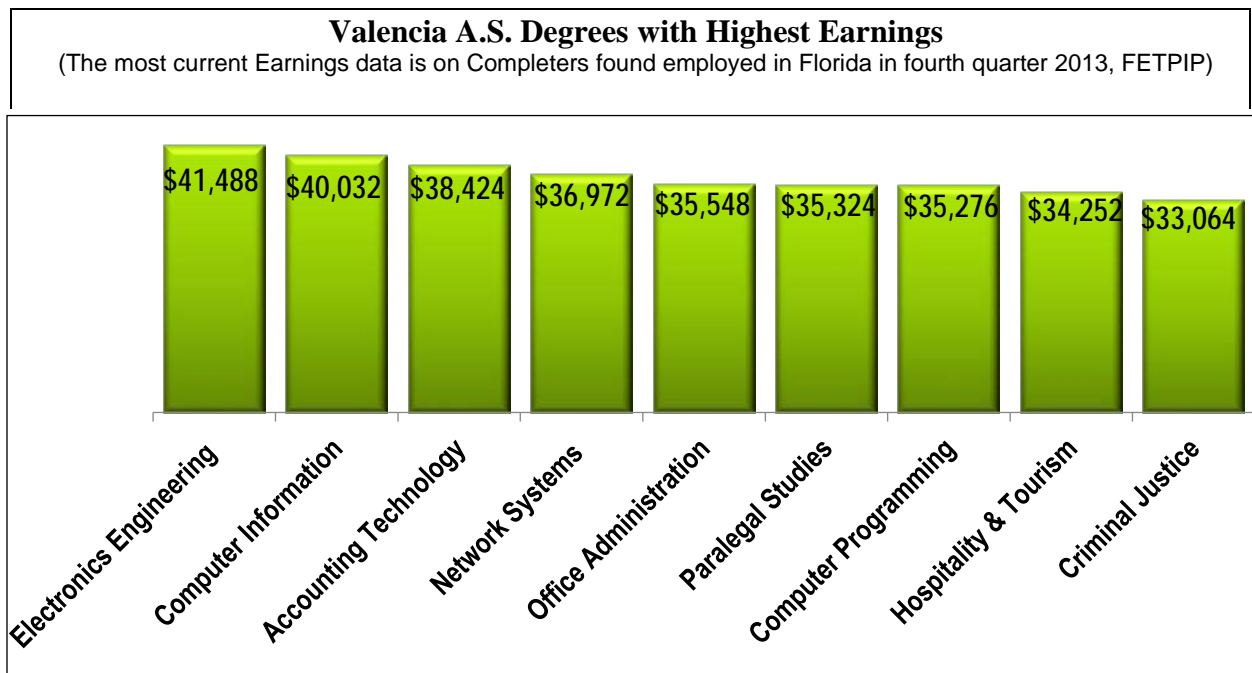


Figure 3: Valencia A.S. Degrees with Highest Earnings

## Career Pathways Partnerships

### *Business Partners*

As the consortium considers best practices for developing and sustaining pathways that meet the needs of the grant, the state, and the students, we must also recognize the need to develop and maintain robust secondary, postsecondary, and business and industry related partnerships. Partnerships involving employers from business and industry and education have more than tripled since the mid-1980s.<sup>15</sup> Today's employers are more committed than ever to helping students become well-educated, well-rounded citizens who have the skills and competencies necessary to secure high wage, high skilled jobs. Education and employer partnerships are central to forming the workforce development programs needed to prepare current and future employees. For several decades, advisory committees have played a valuable role in developing and maintaining programs to meet the needs of employers. Today, Valencia has 31 advisory councils with over 600 members from business and industry, representing 325 different companies. These advisory councils contribute to the long-range planning of career programs by actively participating in curriculum review and validation that provides valuable insight into the employment needs and trends in Orange and Osceola counties.<sup>16</sup>

### *Community and State*



**Valencia hosted table at May OCPS Annual Address**

Valencia's partnerships with the high schools and communities that we serve provide a stepping-stone that enables students to transition to the workforce smoothly and enhance their quality of life. The goal for developing these strong partnerships is to help high school graduates enter postsecondary education with a clear purpose and the ability to learn at the college level. Area high school students who take advantage of Career Pathways earned credit opportunities can receive college credits on their transcripts when they enroll and complete one course at Valencia. Career Pathways credits earned while in high school are specifically designed to have the most impact in an

A.S. degree. Traditionally, the A.S. degree was perceived as a terminal degree. However, Valencia's Career Pathways department, in conjunction with the recently approved B.A.S. degree in Supervision and Management for Industry and B.S. in Nursing submitted to the State by the Career and Workforce Education division, are working to change that perception. Through Valencia's established relationships with our communities, business partners, and State legislators, we continue to look for ways to create multiple entry and exit points along chosen A.S. degree paths.

### *Secondary*

Over 25 years of consistent communication between Valencia and the school districts has fostered collaborative relationships. Valencia deans, faculty, program chairs, school district teachers, and district administrators attend annual meetings to review and update articulation agreements. At these meetings, faculty from Valencia and secondary or technical schools discuss the modality for assessment of each program of study to ensure it is appropriate and/or has not changed. Once all

<sup>15</sup> L. Hood and M. Rubin, *Priorities for Allocating Corporate Partnerships to Improve Education* (Champaign, Illinois: Office of Community College Research and Leadership, University of Illinois at Urbana-Champaign, 2004).

<sup>16</sup> Valencia Career & Workforce Education web site: <http://valenciacollege.edu/academic-affairs/career-workforce-education/advisory-councils-partnerships/councils.cfm>



consortium partners agree upon the articulation and assessment, a POS and an articulation diagram clearly mapping the criteria for award of credit are created and posted on Valencia's Career Pathways web site: <http://valenciacollege.edu/careerpathways/programs.cfm>. Thus, providing parents, students, teachers, guidance counselors and other interested parties access to information on articulated pathways for award of credit.

Employer advisory boards also play a key role in identifying new programs of study. Whether identification of the new program of study is through an advisory board or new or changed curriculum, forming a committee to develop the articulation is the next step. This committee—usually comprised of school district teachers and Valencia program chairs and/or faculty—meets to ensure alignment of the secondary curriculum framework with curriculum outcomes of the articulated college courses under consideration. If Valencia faculty agree curriculum aligns, the committee determines the modality of assessment used for award of credit. Modalities of assessment include locally approved joint assessments, locally approved projects, course final exams (CFE), industry certifications or some combination. The partners in each agency develop and agree upon the FLDOE POS template, which is the program's cornerstone. Students enrolled in articulated courses or programs are then able to take an approved assessment each spring to be eligible to earn articulated college credit(s).

### *Articulation Agreements*

The Career Pathways consortium currently has 24 articulations in place with Orange and/or Osceola Counties. Valencia's Career Pathways department continues to expand secondary partnerships with other school districts at their request. In 2017, Valencia entered into agreements with Lake and Marion Counties and will soon have in place five articulations with Lake County and five articulations with Marion County.

Career Cluster	HS CTE Program	Valencia Program & Course (credit)	County/School District
Architecture & Construction	Building Construction Technology	<b><u>Building Construction Technology</u></b> ETD 1031C Introduction to Construction/Drafting (3)	OCPS, SDOC, Lake, Marion
	Drafting	<b><u>Drafting &amp; Design Tech</u></b> ETD 1100C Engineering Drawing (3) ETD 1320 Introduction to CADD (3)	OCPS, Lake
Arts, A/V Technology & Communications	Digital Design	<b><u>Graphic &amp; Interactive Design</u></b> OST 2813 Desktop Publishing (3)	OCPS, SDOC, Lake
	Digital Video/TV Production	<b><u>Digital Media Technology</u></b> DIG 2030C Digital Video and Sound (3)	OCPS
Business Management & Administration	Accounting Applications	<b><u>Accounting Tech</u></b> APA 1111C Basic Accounting (3) ACG 2450C Computer Accounting 1 (3)	OCPS
	Administrative Office Specialist	<b><u>Office Administration</u></b> OST 2813 Desktop Publishing (3) OST 1141 Computer Keyboarding (1) OST 1755 Microsoft Word Introductory (3) OST 2852 Microsoft Excel Introductory (3) <b>Or</b> OST 1755C Microsoft Word (1) OST 2852C Microsoft Excel (1) OST 2828C Microsoft PowerPoint (1)	OCPS, SDOC

Career Cluster	HS CTE Program	Valencia Program & Course (credit)	County/School District
Education & Training	Early Childhood Ed	<b><u>Early Childhood Education</u></b> EEC 2001 Early Childhood Ed (3) EEC 2732 Health, Safety, and Nutrition (3) ARE 2000 Art & Creativity (3)	OCPS
	Early Childhood Ed	<b><u>Early Childhood Education</u></b> EEC 1940 Internship (preschool) (3)	Seminole State
Engineering & Technology Education	Communications Technology (Graphics)	<b><u>Graphic &amp; Interactive Design</u></b> GRA 1203C Layout, Design & Copy Prep (3)	OCPS
	Electronic Technology	<b><u>Electronics Engineering Technology</u></b> EET 1214C Intro to Engineering Technology (3)	OCPS
	Pathways to Engineering (PLTW)	<b><u>Drafting &amp; Design Tech</u></b> ETD 1100C Engineering Drawing (3)	OCPS, SDOC, Lake
Health Science	Health Unit Coordinator; Medical Assisting; Medical Coder/Biller; Medical Lab Assisting (Phlebotomy); Medical Records Transcribing; Nursing Assistant; Patient Care Technician; Practical Nursing	<b><u>Health Information Technology</u></b> HSC 1531 Medical Terminology (3)	OCPS, SDOC, Marion
Hospitality & Tourism	Culinary Arts	<b><u>Hospitality and Tourism Management</u></b> FOS 2201 Food Service Sanitation Management (3) FSS 1203C Quantity Food Production I (3)	OCPS, SDOC, Marion, Lake
	Lodging Operations	<b><u>Hospitality and Tourism Management</u></b> HFT 1000 Intro to Hospitality & Tourism Mgmt (3) HFT 2223 Human Relations & Supervisor Dev. (3) FOS 2201 Food Services Sanitation Management (3)	OCPS, SDOC
Information Technology	Applied Cyber Security	<b><u>Network Engineering Technology</u></b> CET 2178C A+ Concepts (Hardware) (3) CET 2179C A+ Concepts (Software) (3)	OCPS
	Network Support Services	<b><u>Network Engineering Technology</u></b> CET 2486C Local Area Networks (3)	OCPS
	Technology Support Services	<b><u>Network Engineering Technology</u></b> CET 2178C A+ Concepts (Hardware) (3) CET 2179C A+ Concepts (Software) (3)	OCPS
Information Technology	Digital Information Technology	<b><u>Office Administration</u></b> OST 2813 Desktop Publishing (3) OST 1141 Computer Keyboarding (1) OST 1755 Microsoft Word Introductory (3) OST 2852 Microsoft Excel Introductory (3) <b>Or</b> OST 1755C Microsoft Word (1) OST 2852C Microsoft Excel (1) OST 2828C Microsoft PowerPoint (1)	OCPS, SDOC
	Java Development & Programming	<b><u>Computer Information Technology</u></b> COP 1000C Intro to Programming Concepts (3)	OCPS
	Business Computer Programming	<b><u>Computer Information Technology</u></b> COP 1000 Intro to Programming Concepts (3)	OCPS
	Web Development	<b><u>Computer Information Technology</u></b> COP 2822 Web Site Development (3)	OCPS, SDOC, Marion
Law, Public Safety, & Security	Criminal Justice Operations	<b><u>Criminal Justice</u></b> CCJ 1020 Introduction to Criminal Justice (3) CJL 2100 Criminal Law (3) CJE 2003 Career Choices in Criminal Justice (1)	OCPS
Marketing, Sales & Service	Marketing Management & Entrepreneurial Principals	<b><u>Business Administration</u></b> MAR 2011 Principles of Marketing (3)	OCPS, SDOC
	Sports, Recreation, & Entertainment Marketing	<b><u>Business Administration</u></b> MAR 2011 Principles of Marketing (3)	OCPS, SDOC

**Figure 4: All Career Pathways Articulations by Career Cluster**

## Career Pathways Consortium Collaborations

### *Career Pathways Co-Director and Coordinator Meetings*

The consortium co-directors and/or coordinators meet regularly throughout the year to share updates and exchange information.

**November 17, 2016 – Coordinator 2017-2018 Planning Meeting:** Career Pathways consortium coordinators met to plan the program and articulation review event. Also discussed were potential dates and plans for project grading events. Valencia's Data Management Specialist explained how data flows between OCPS and Valencia. Both teams agreed that IT involvement was critical to streamlining these processes.

**January 18, 2017 – IT Collaboration:** IT leadership from Valencia and OCPS, Career Pathways Manager, and AVP of CWE met to discuss the importance of sharing Career Pathways student data and how to streamline the process and secure the data. The outcomes of this meeting include: 1) Set up of a secure FTP server at Valencia to which OCPS IT transfers student data, and 2) Development and approval of a "Student Information Confidentiality and Non-Disclosure Agreement" (NDA). OCPS IT and Valencia each worked with respective legal counsels, and in April 2017, leadership on both sides signed the NDA. Both IT teams and Career Pathways Data Management Specialist worked expediently to finalize processes and begin transferring student data and class rosters prior to the end of 2016-2017 OCPS school year on June 8, 2017.

**March 2, 2017 – Co-Directors and Coordinators Meeting:** Co-directors and coordinators met to finalize plans for the Career Pathways Update and Program Event taking place on March 8, 2017. Valencia's Career Pathways Manager shared the status of the IT collaboration. OCPS co-directors requested that Valencia consider articulating PSAV courses for Career Pathways credits to give high school students dual enrolled at OTC the same credit opportunities as high school students in articulated CTE courses. All attending agreed that discussions for these articulations would begin summer 2017.

**June 7, 2017 – Coordinators Meeting:** Career Pathways teams from Valencia and OCPS met to discuss scheduling PSAV articulation meetings and the transfer of CFE and industry certification assessment results, as well as activities, processes and timelines for 2017-2018. The Career Pathways team will meet in August with Valencia Marketing and Strategic Communications (MSC) to discuss print collateral. In addition to developing printed materials to promote Career Pathways in schools, the OCPS and Valencia Career Pathways teams are working together to raise teacher awareness of projects available for assessment of Career Pathways credits. Valencia Career Pathways has shared electronic files for project rubrics, guidelines, and instructions for assessments developed by Valencia with the OCPS Career Pathways team who will create a repository accessible to any teacher interested in assessing students for Career Pathways credit.

## Career Pathways Consortium Update and Program Review



**March 8, 2017:** Valencia hosted the consortium's biennial Career Pathways Update and Program Review at the West Campus Special Events Center. Over 100 faculty, program chairs, deans, staff and administrators from OCPS, SDOC and Valencia attended this event. During the morning's general session, the Career Pathways Manager and AVP of CWE shared updates, data, and information with our consortium partners (*pictured above*).



Next, everyone broke into groups based on programs and went to designated areas to review existing articulation agreements and discuss the potential for new articulations (*marketing pictured left*). There were 17 program groups, and materials such as

FLDOE curriculum frameworks, Valencia's curriculum outcomes and learning objectives, articulation diagrams, and notes from last year's review (if available) were provided for each group. Career Specialists from OCPS or resource teachers from SDOC were stationed at each table to take notes and facilitate the discussion. The room buzzed with collaborative conversation. Following group discussions, OCPS provided lunch for all in attendance. After lunch, the closing session included updates from the TE advisors and the Valencia Transitions team.

In addition to reviewing and updating existing articulations, another exciting outcome of the meeting is the potential for developing the new articulation agreements in 2017-2018 listed in Figure 5. This table also includes articulations under discussion with other counties, and the potential for developing PSAV articulations.

Secondary Program	Valencia Degree/Program	County	Potential Credits
Biomedical Science PLTW	Biotechnology	OCPS, SDOC, Lake	4
Applied Robotics (PSAV)	Robotics Specialization	OCPS PSAV, Lake	9
Drafting (PSAV)	Drafting and Design Technology	OCPS PSAV, Lake	3
Computer Systems & Information Technology (PSAV)	Network Engineering Technology	OCPS PSAV	3-6
Culinary Arts 1 and 2	Culinary Management	Lake, Marion, Seminole	3-6
Agriculture Bio Technology	Plant Science & Agriculture Technology	Lake	TBD
AgriTechnology	Plant Science & Agriculture Technology	Lake	TBD
Horticulture	Plant Science & Agriculture Technology	Lake	TBD
Building Construction Technologies	Building Construction Technology	Lake, Marion	9
Anatomy & Physiology	Allied Health	Marion	3

**Figure 5: Ten potential new articulation agreements for 2017-2018.**

### Grading Events and Articulation Meetings

**April 4, 2017 – Drafting Day:** This grading event took place from 8:00 am to 12:00 pm at the Special Events Center on West Campus. Approximately 25\* nervous and excited students from Apopka and Olympia High Schools arrived on buses. Students were prepared to discuss their portfolios with the faculty graders. Faculty graders participating this year were Sylvia D'Torres (Olympia HS), William Gonzalez (Apopka HS), Andy Ray (Valencia) and Sandra Bowling (Valencia). Assisting the students and faculty graders in the process were facilitators Anissa Mohun (Valencia), Alex Cortes and Brandi Heidelberg (OCPS), Rob Strobbe (Valencia) and Kailyn Williams (Valencia). Following the portfolio interview, Andy Ray gave the students a tour of the drafting technology lab in Building 9. Mr. Gonzalez indicated he had nine students who were unable to make Drafting Day, and Andy Ray graciously agreed to interview these students at Apopka HS.

**April 12, 2017 – Digital Design and Communications Technology (Graphics) Grading Day:** This grading event was scheduled from 8:00 am to 12:00 pm in the Special Events Center on West Campus for grading two Career Pathways projects. One Valencia faculty (Marie Howard), eight OCPS digital design instructors and two SDOC digital design instructors spent the morning grading approximately 200\* Grizzly Gazette (digital design) projects.

*\*Drafting and digital design results estimated, as all results not yet posted.*



John Sousa (Valencia) graded 34 communications technology (graphics) projects (*example pictured left*). This was the first time graphics project grading was included in this grading day and enabled a faster turnaround for returning student projects. Professor Sousa also created a standard format for providing feedback to the teachers on students' projects

Additionally, Career Pathways coordinators from OCPS and SDOC attended, and we were able to have a brief coordinator's meeting to discuss timelines for data transfer and assessment results.

**June 27, 2017 – Applied Robotics Articulation Meeting:** The Career Pathways Manager enjoyed



watching students compete in the Summer Robotics Institute Competition (*pictured left*). After the competition, the program chair for Electronic Engineering Technology, instructors from Mid Florida Campus (MFC) Robotics Summer Institute, TE Advisor for MFC, and Career Pathways Manager met to discuss the potential for articulating credit to Valencia

from OCPS CTE Applied Robotics Summer Institute. Steve Bowman (MFC) gave Veeramuthu (Ravi) Rajaravivarma (Valencia) a tour of the MFC robotics lab. It was determined that there is potential for Valencia to articulate credits for the Applied Robotics Summer Institute program, and Valencia will continue internal discussion for developing articulation agreement.

### Conferences

**October 5-7, 2016 – National Career Pathways Conference, Indianapolis, IN –** The Career Pathways Manager attended this conference and had the opportunity hear about federal legislative action related to Career Pathways and network with individuals from all over the U.S. The visit for those of us from Central Florida was extended several days due to Hurricane Matthew!



**January 11-13, 2017** – Florida Career Pathways Network (FCPN) Symposium, Jupiter, FL – Career Pathways Manager represents Valencia and Region 4 (Orange, Osceola, and Polk) as a Regional Vice President on the FCPN board. The Career Pathways team attended this symposium to learn about activities in Career Pathways at the state and local levels. Career Pathways Manager and Career Pathways Facilitator from Seminole State received leadership certificates in the closing ceremony (*pictured left*) for their best practices presentation “Can We Talk...about how to link school and college Career Pathways?”

## Career Pathways Data

### *Shared Data for Communication, Planning, and Continuous Improvement*

It is important to gather data that tracks the progression of students and whether they are improving and meeting minimum requirements. Good progression helps maintain the program’s integrity. Consistent data can communicate program benefits and provide guidance for improvement. Other valuable uses for data are to assess community needs, highlight gaps in education and employment programs, and monitor the implementation and outcomes of pathways. However, data collection takes time and money. Large partnerships often make it difficult to collect new data quickly and efficiently. Other barriers include differences in policies, definitions and interpretations.<sup>17</sup>

Valencia and school districts with whom we have articulation agreements have historically collaborated on the exchange of student information that enables tracking and reporting Career Pathways data and timely communication with the students. In addition to the protection of (minor) student information afforded under FERPA, Valencia entered into a non-disclosure agreement with OCPS effective April 2017 and created space on a secured FTP server at Valencia to ensure that all student information is in a protected environment. In a true collaborative partnership, IT departments from OCPS and Valencia came together with the Career Pathways department and worked expediently to develop and implement a secure transfer of data for approximately 20,000 potential Career Pathways students prior to the end of the school year, June 8, 2017. We are happy to report that the streamlined process has made data sharing more efficient and effective. Valencia Career Pathways received class rosters and assessment results in June 2017 for non-CFE and non-industry certification assessment results. The CFE and industry certification results will be transferred to Valencia in late July.

The Career Pathways department has worked with Valencia’s vendor, Xperient, to refine the process for printing and mailing letters notifying students of potential credits earned or attempted-but-not-earned while in CTE secondary and/or postsecondary classes. Using shared data for students who assessed in articulated courses, the Career Pathways department mailed approximately 6,400 notifications this year. Included in the student notification is the college course name and number, name of the articulated A.S. degree program for the earned credit, along with an instructional flyer explaining how to claim earned credits upon enrolling at Valencia.

In 2014-2015, Valencia agreed to use OCPS CFEs as an assessment for award of credit in most articulated courses. Consequently, the number of CTE students increased to approximately 20,000, creating the necessity for data management processes to become more efficient. One solution

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<sup>17</sup> Hull, Dan, *Career Pathways Education with a Purpose*.

implemented this year is to eliminate manually identifying each student and placing credits in escrow in Banner. Students are now required to submit the “[Get Your Credits](#)” form online to claim credit. The Career Pathways office receives the credit request form in the shared Career Pathways email folder. The Career Pathways Specialist monitors the folder and enters student credit in Banner as either 1) on hold until the student completes a Valencia course or 2) in the transcript if student has met all criteria. Career Pathways has already received nearly 150 credit requests in response to the notifications that went out in late June.

### *Data Collection, Compilation and Reporting*

Career Pathways data compilation and reporting does not begin until the conclusion of the current school year. Consequently, most recent data reported in this report is for assessments taken in 2015-2016. Data collection for 2015-2016 took approximately nine months using a variety of transfer methods. After the IT collaboration begun in January 2017, data collection is now more efficient and secure.

The timeline for collecting 2016-2017 data began in spring 2017 with the transfer of class rosters from the school district’s IT department to Valencia’s server. The Career Pathways Data Management Specialist uses class rosters to create electronic files sent to the school districts for distribution to teachers. Teachers use the electronic forms to record assessment results for projects, portfolios, and Valencia assessments that are not CFEs or industry certifications. The Career Pathways staff at the school district coordinates collection and transfer of completed forms to the OCPS IT department. Once the school district IT department transfers assessment results to Valencia’s server, the Career Pathways Data Management Specialist begins the process of importing and compiling this information into the department’s database. This process continues until Valencia has received all student assessment results. In previous years, Valencia received CFE and industry certification results in September or October. With the streamlined transfer process now in place, we expect to receive all assessment results for 2016-2017 by the end of July.

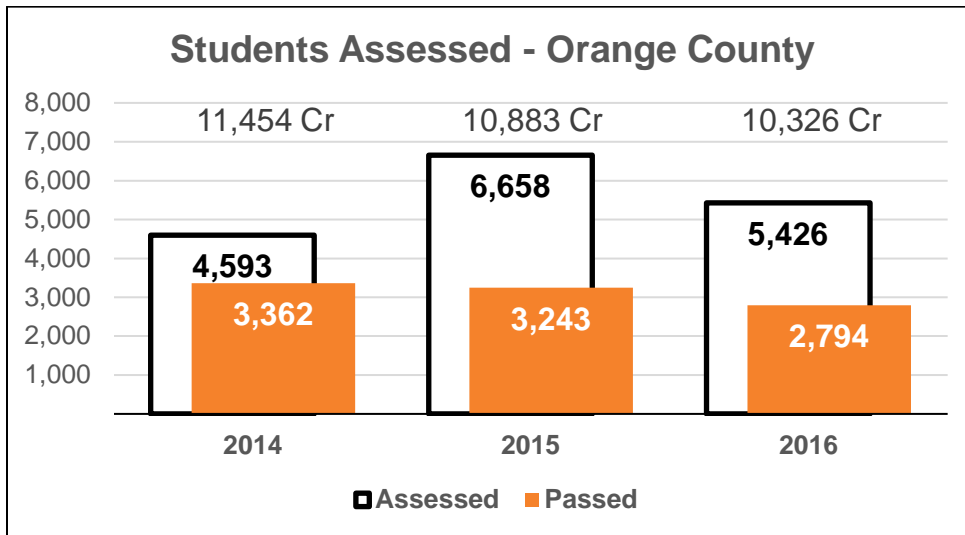
### *Data for 2015-2016*

Figures on the following pages depict data compilation and comparison over a three-year period of...

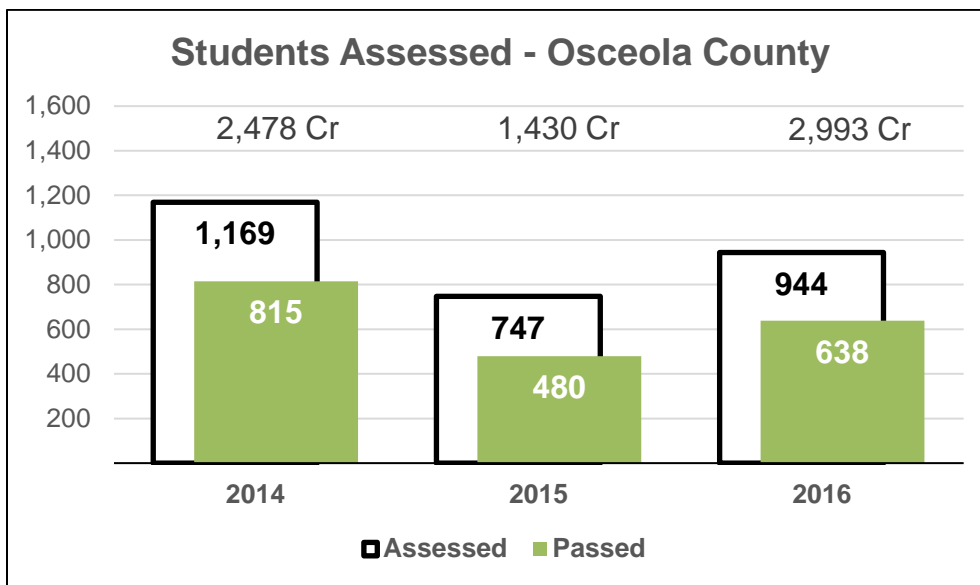
- The number of students who assessed in Orange and Osceola Counties
- The number of students awarded credits at Valencia
- The degrees or programs declared by Career Pathways students
- Career Pathways student graduation and retention rates.

The data reporting period shown in the charts is from July to July, and the year shown indicates the end of the school year (e.g., 2016 is the 2015-16 school year). In all charts, the orange bar represents OCPS and the green bar represents SDOC.

***Because students have 24 months to claim Career Pathways credits, data for each year includes students who may have graduated within the last two years.***

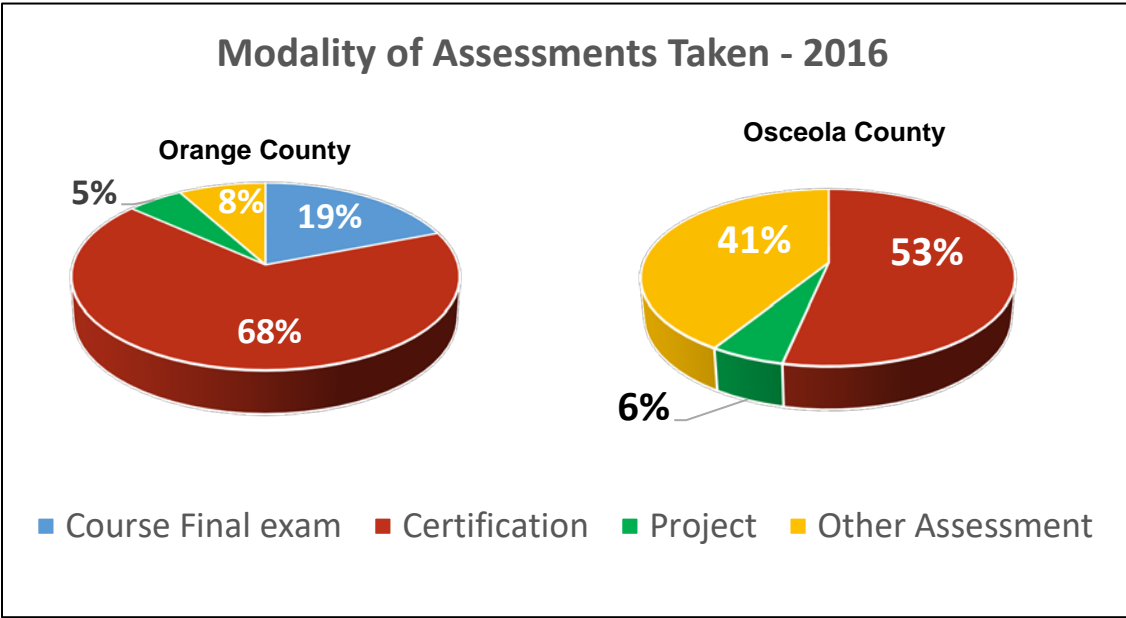


**Figure 6: Three-year comparison for number of OCPS students assessing and number of students passing. Number at top of chart followed by “Cr” indicates number of potential credits earned in that reported year. In 2016, pass rate was 51%; in 2015 pass rate was 49% and in 2014 pass rate was 73%. In 2015, adding CFEs to the assessment for award of credit in many courses increased the number of students who assessed from the prior year by 31%. However, the number of students passing from 2014 to 2015 decreased by 4% and the pass rate decreased by 24%. Most assessments require a minimum score of 70%.**

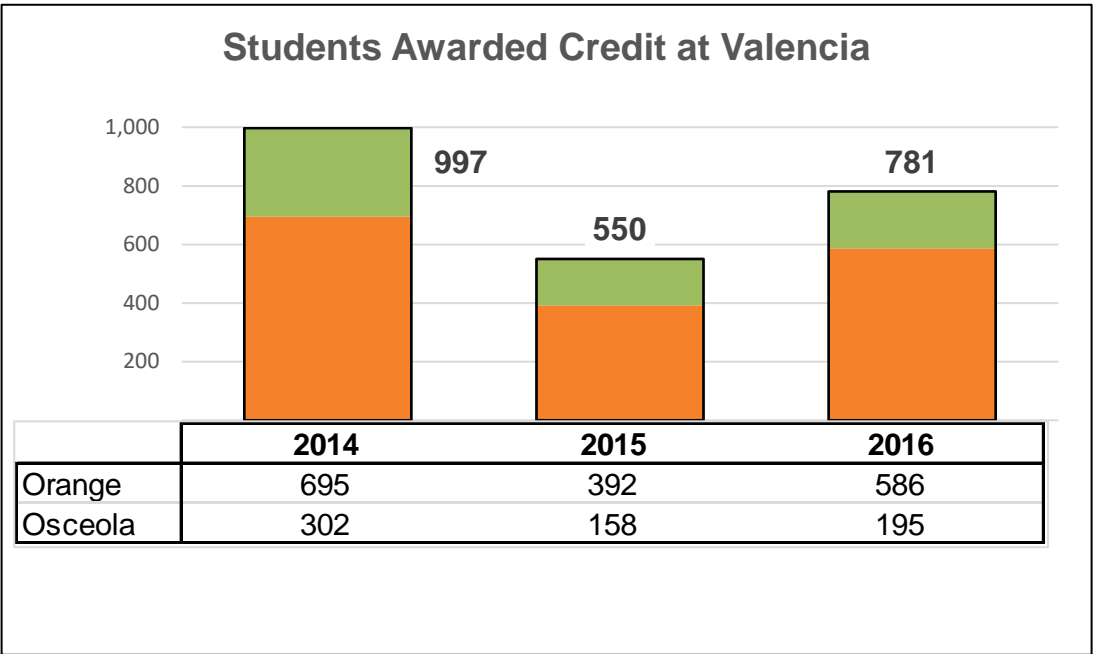


**Figure 7: Three-year comparison for number of SDOC students assessing and number of students passing. Since 2014, Osceola has experienced a decline in pass rate. Pass rate in 2016 was 32%, in 2015 64% and in 2014 69%. Number at top of chart followed by “Cr” indicates number of potential credits earned in that reported year.**

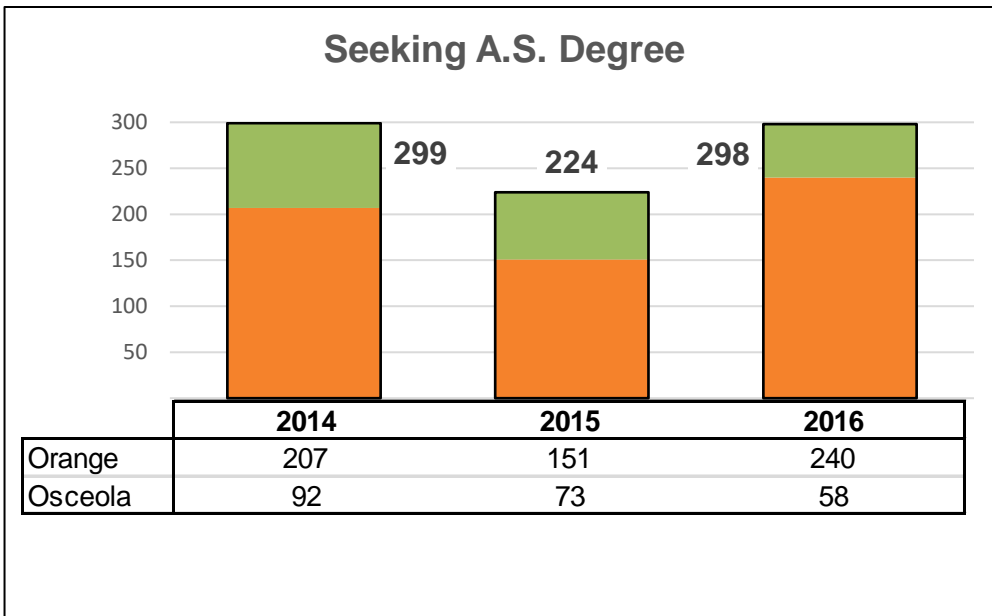




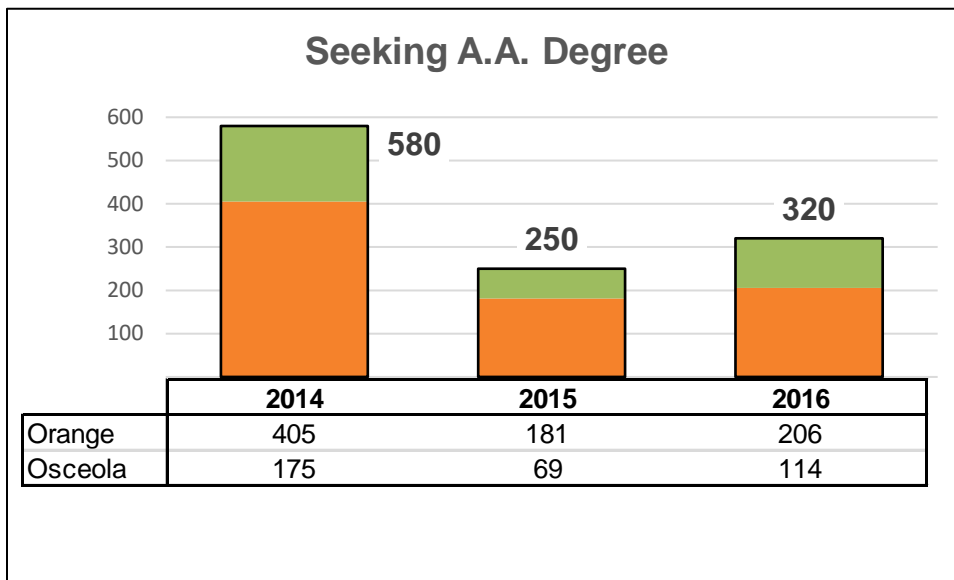
**Figure 8: Modalities of assessments for award of credit are CFE, industry certification, project, portfolio or some combination. Osceola did not use CFE for assessment in the 2016 reporting year. “Other Assessment” category indicates multiple options are available for award of credit but not specifically identified. Beginning 2017-2018, Career Pathways will individually track each assessment option available for credit.**



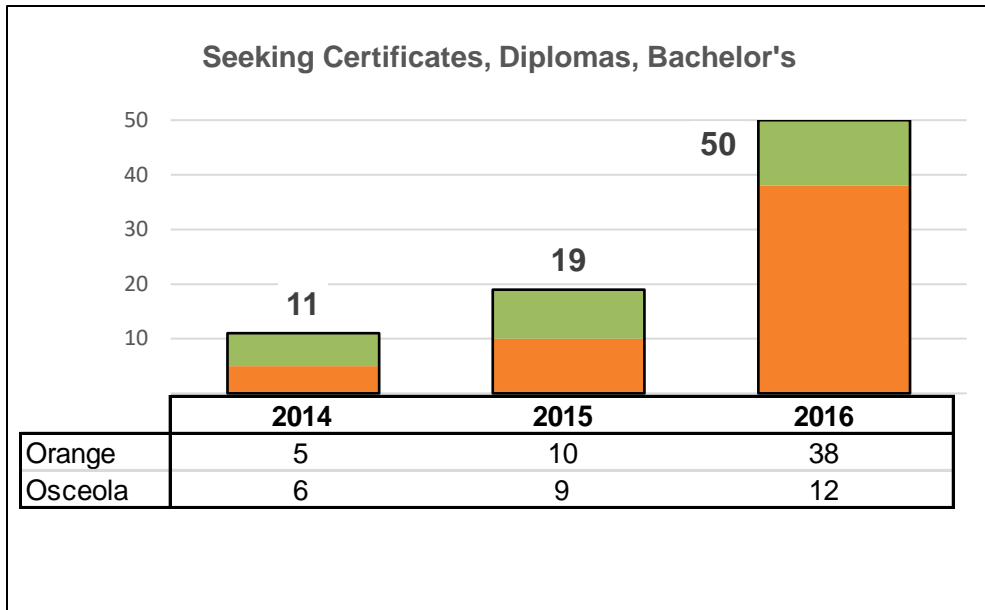
**Figure 9: Three-year comparison of Career Pathways students identified and awarded credit at Valencia indicates that the ratio of Orange to Osceola students in Career Pathways is somewhat consistent. In 2014, 70% of the total number of students awarded credits were OCPS students and 30% were SDOC students. In 2015, 71% were OCPS and 29% were SDOC, and in 2016, 75% were OCPS students and 25% were SDOC students.**



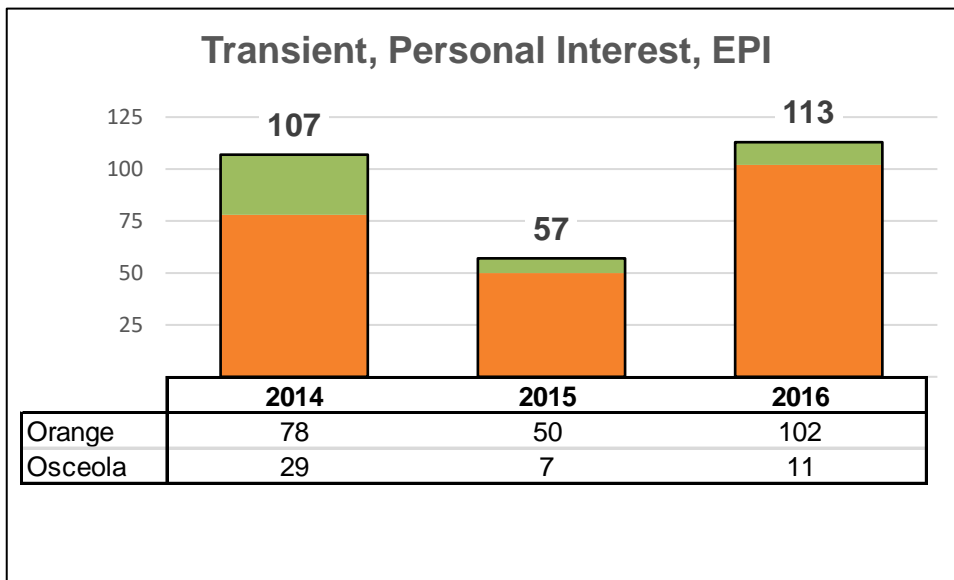
**Figure 10: Three-year comparison of Career Pathways students seeking an A.S. degree. In 2016, there was a 25% increase over 2015, which equaled the 25% decrease from 2014 to 2015 in Career Pathways students who selected A.S. degrees.**



**Figure 11: Three-year comparison of Career Pathways students seeking A.A. degrees indicates there was a 57% decrease from 2014 to 2015 and a 22% increase from 2015 to 2016. However, there was a 45% decrease from 2014 to 2016.**



**Figure 12: Three-year comparison of Career Pathways students seeking other credentials (technical certificates, advanced technical diplomas, vocational credit certificates and bachelor degrees) indicates a steady increase of Career Pathways students in this category.**



**Figure 13: Three-year comparison of Career Pathways students 1) currently enrolled at one institution but have registered for courses at another institution, 2) enrolled for personal interest or job improvement and classified as non-degree seeking, or 3) taking Educator Preparation Institute (EPI) courses to obtain a Professional Certificate in Teaching to be able to teach in Florida. Data indicates a 47% decrease from 2014 to 2015 but an almost 50% increase from 2015 to 2016.**

Figures 15-18 depict three-year comparisons by year and county of A.S. degree programs declared by Career Pathways students.

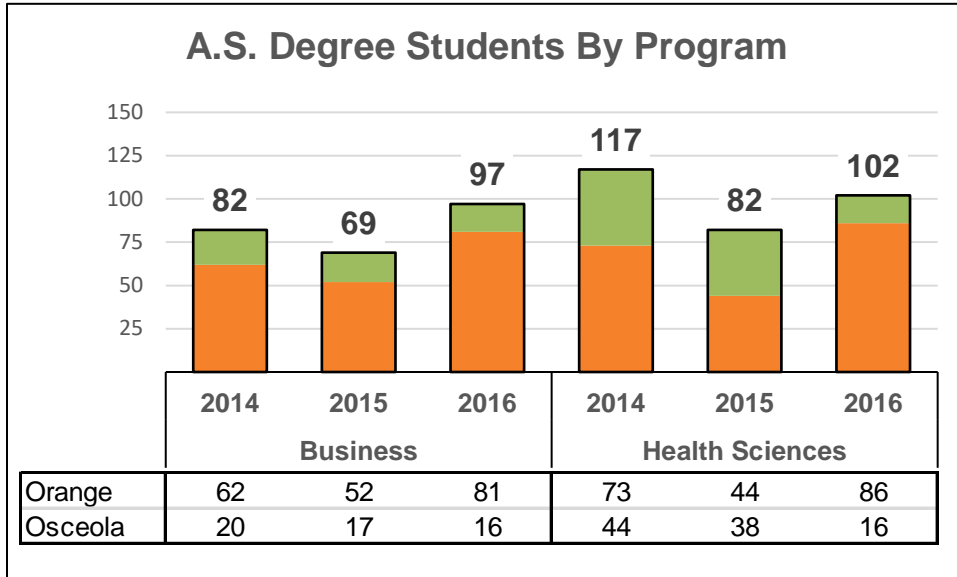


Figure 15: Business and Health Sciences have highest enrollments.

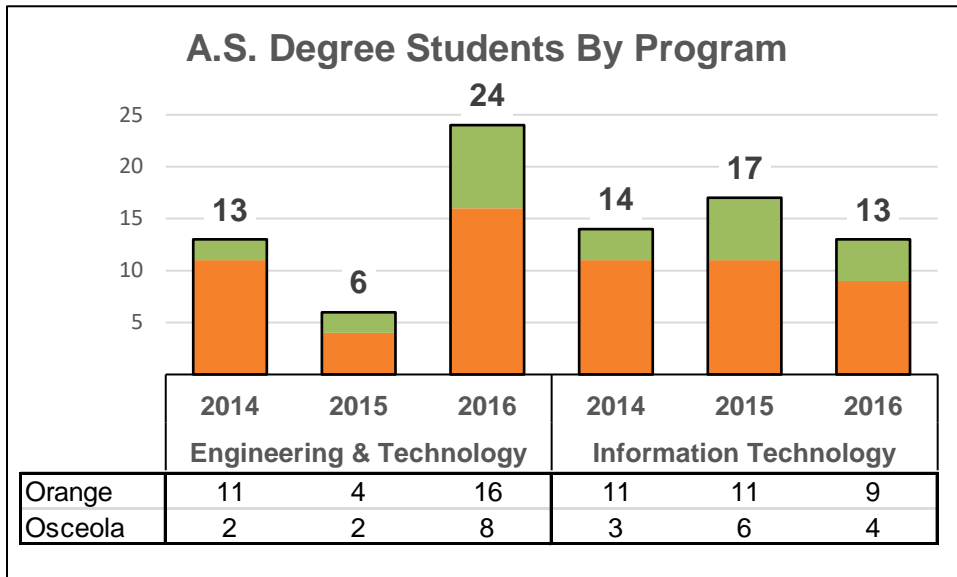
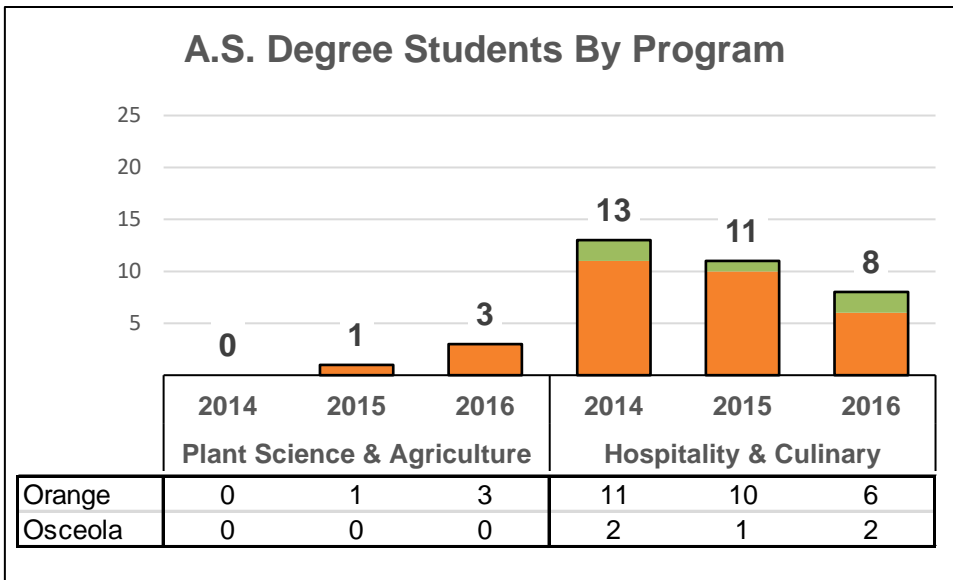
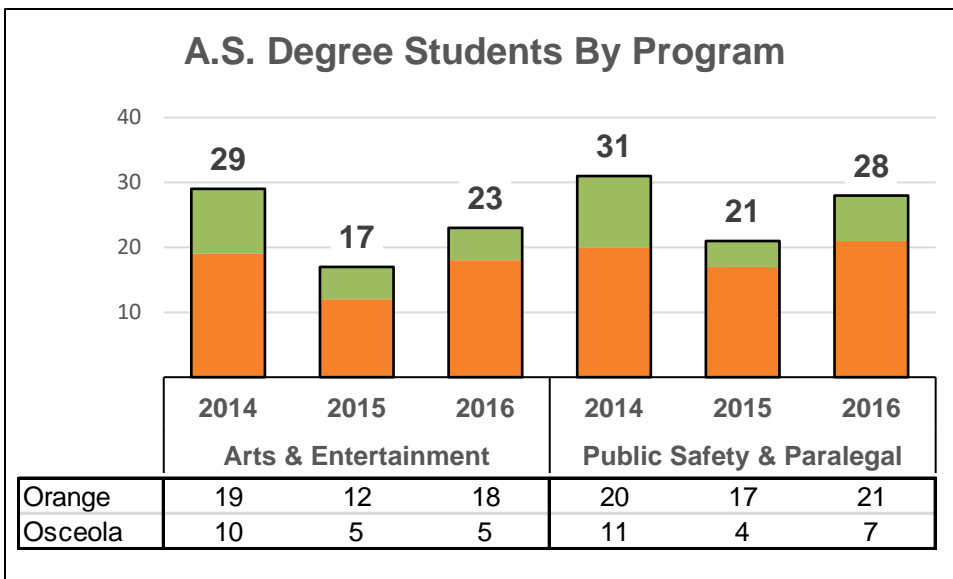


Figure 16: Engineering & Technology and Information Technology



**Figure 17: Plant Science & Agriculture and Hospitality & Culinary**



**Figure 18: Arts & Entertainment and Public Safety & Paralegal**

Figures 19-22 show data for Career Pathways student enrollment at and graduation from Valencia.

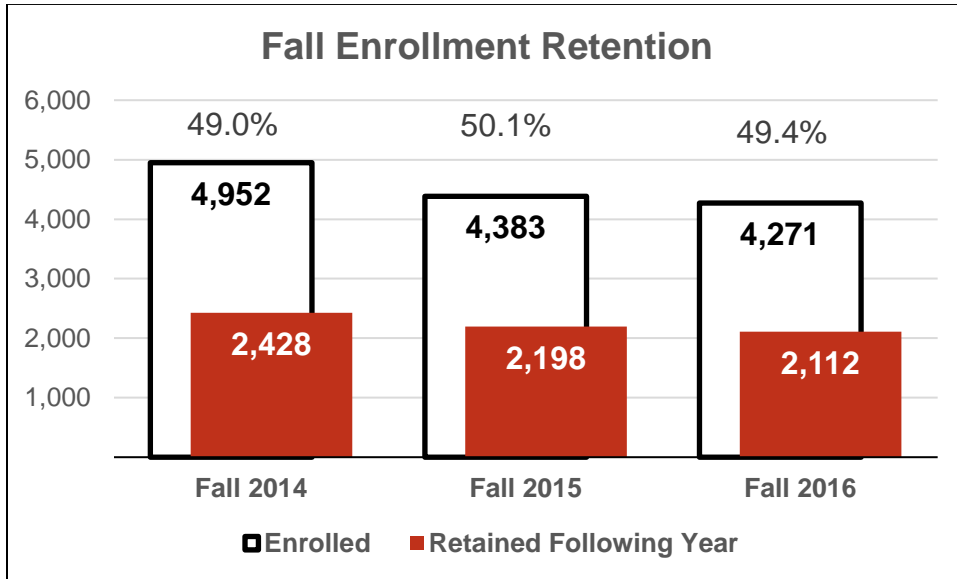


Figure 19: Career Pathways students are required to take one Valencia course to receive award of Career Pathways credit. The three-year comparison of enrollment retention indicates that approximately 50% of Career Pathways students consistently continue enrollment at Valencia one year later.

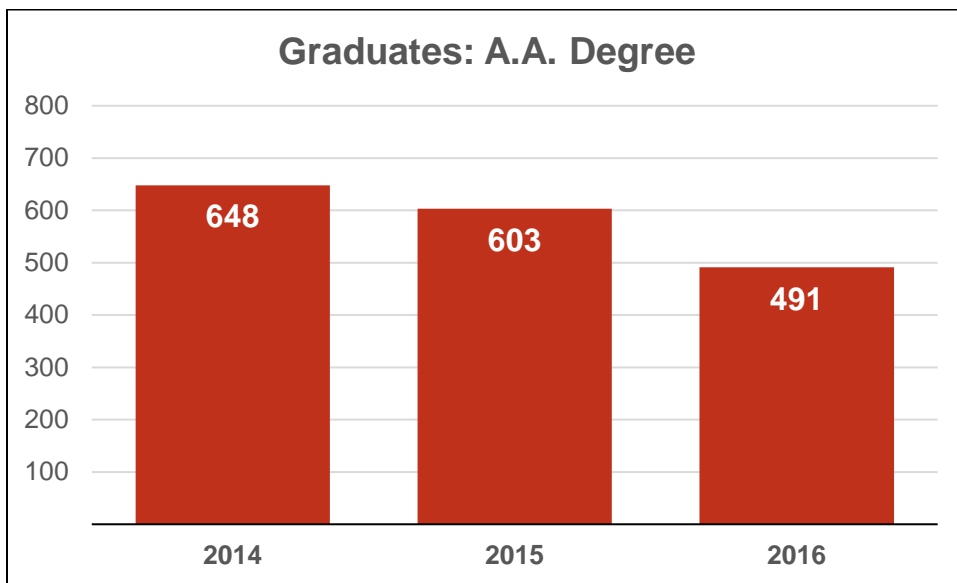
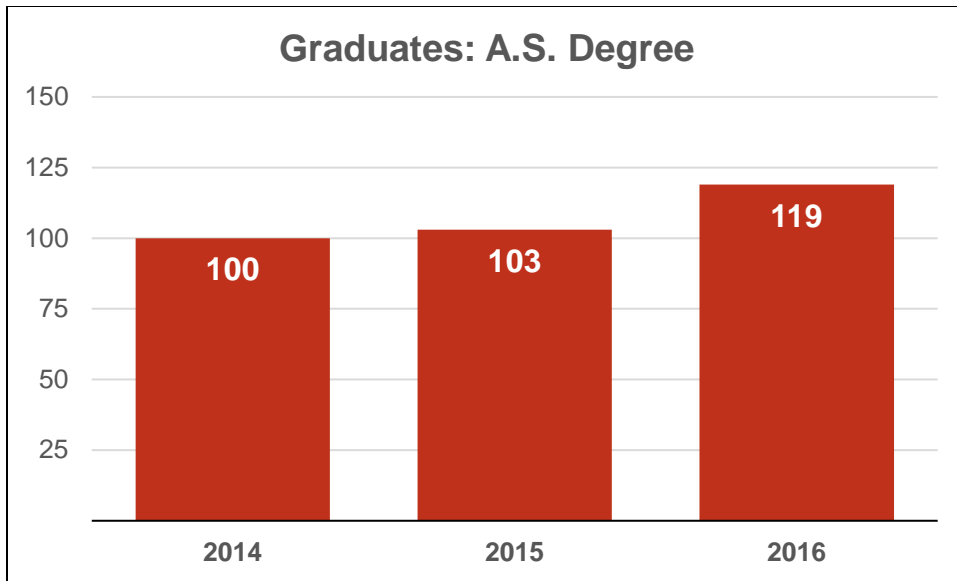
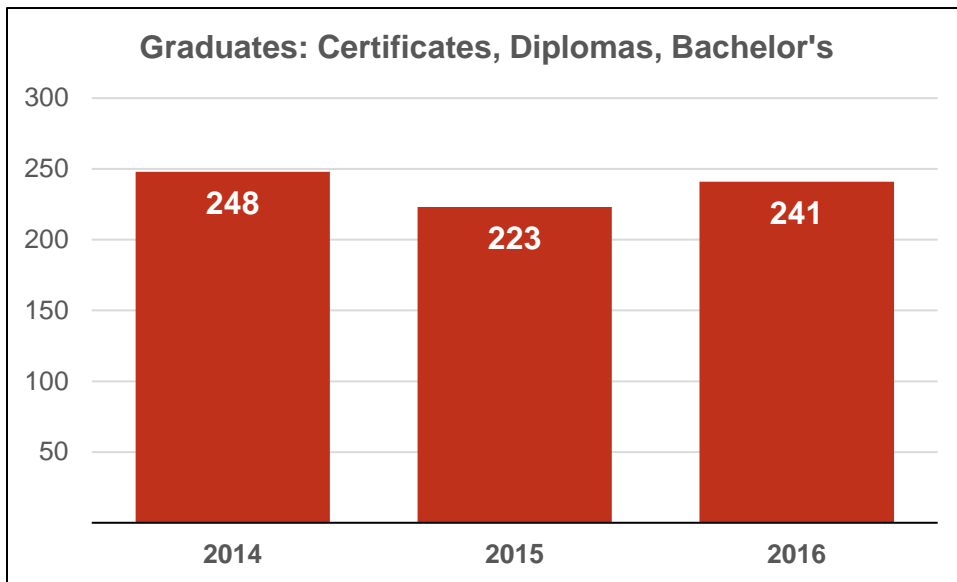


Figure 20: Three-year comparison of Career Pathways students graduating from Valencia with A.A. degrees shows a 24% decline between 2014 and 2016.



**Figure 21: Conversely, three-year comparison of Career Pathways students graduating from Valencia with A.S. degrees shows a 19% increase between 2014 and 2016.**



**Figure 22: Three-year comparison of Career Pathways students graduating from Valencia with technical certificates, advanced technical diplomas, vocational credit certificates or bachelor degrees remains fairly consistent.**

SECTION TWO  
TECH EXPRESS TO VALENCIA IMPACT

**TECH  
EXPRESS** TO

VALENCIA COLLEGE



## Background History



While Tech Express to Valencia officially launched in November 2016, this new initiative was over two years in the making. Tech Express to Valencia strengthens and expands the relationship that already exists between Orange Technical College (OTC) and Valencia College (Valencia). Leadership from Orange County Public Schools (OCPS) and Valencia College had a vision to increase awareness and understanding in the technical college student population—in particular program graduates—of the opportunities and benefits that this partnership offers. For six months, the Tech Express (TE) advisors have actively engaged with students, instructors, and administrators on technical campuses and new strategies for further strengthening and developing this partnership are now under development.

## Mission and Purpose

As the partnership continues to strengthen and the success of this initiative grows more evident each quarter, the focus of Tech Express remains the same—helping students advance their education and careers. Students completing one of the 48 articulated programs at OTC have the opportunity to earn college credits at Valencia once they pass the approved assessment and complete one course in the articulated program linked to their technical college program. The TE advisors engage in outreach activities and communications that encourage tech program graduates to meet with them to discuss credit opportunities in Valencia's career and technical degree programs. The TE advisors have offices on each campus and are available to assist students with the award of credit process and the transition to Valencia.

The goal is to help students understand and take advantage of the following benefits:

- 1) Opportunities to earn from 3 to 27 college credits (depending on the articulation agreement) at Valencia by completing an articulated technical college program at OTC.
- 2) Student and instructor access to a Valencia TE Advisor who can provide on-site assistance with the process to submit documentation necessary to receive earned credit.
- 3) On-site assistance with Valencia's application and enrollment process.
- 4) An opportunity to explore additional career options and expand future career potential.

## Tech Express to Valencia Team



**Tech Express  
Advisors: I-r Lisa  
Bliss, Francisco  
Perez, Anita Gentz**

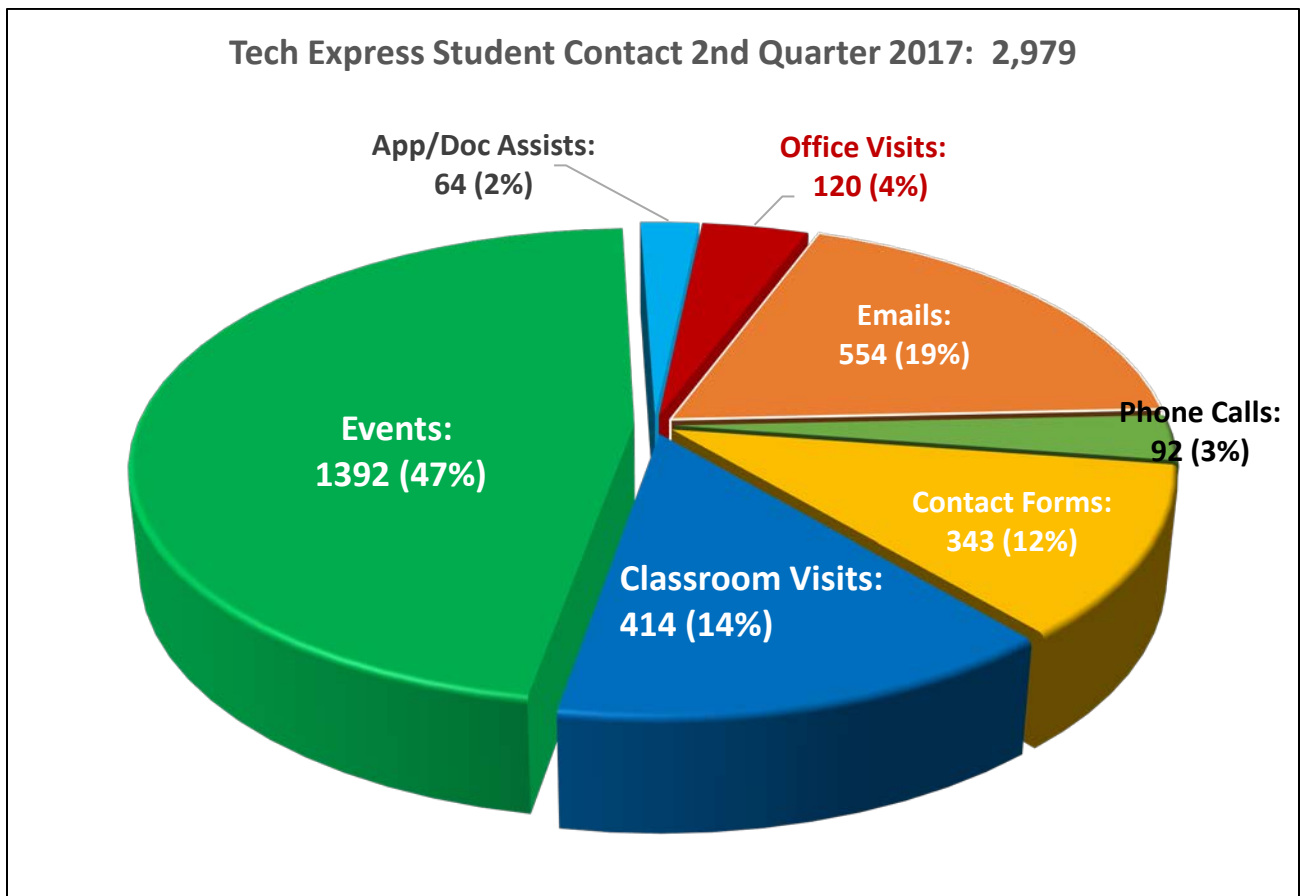
Valencia's three full-time advisors are now familiar faces on all of the technical campuses. Staff and administrators experience the dedication of these individuals through their commitment to the partnership. Students benefit from their passion through the team's ability to engage and transition students along the path to education and career advancement in ever-increasing numbers.

The TE advising team reports their student interactions and activities each quarter. Results are depicted in Section 2A as graphical representations of data for each quarter and cumulative January 1 to June 30, 2017. Section 2B provides explanations of the team's interactions and activities by campus, and Section 2C details ongoing and future activities.

## Section 2A: Second Quarter Data: March 1 – June 30, 2017

The TE advisors are fully engaged in activities and interactions on each of his or her assigned campuses. The completion of second quarter and the resulting data allows us to compare contacts and activities with those that took place in the first quarter. As we move through each quarter, we will review data to ensure we are collecting the right data for tracking and comparison. Analyzing this data and looking for trends will assist in making projections that contribute to planning and improving strategies.

The following graphs depict student outreach interactions and support activities in which Valencia's TE advisors participated during second quarter. First quarter and cumulative data are provided for comparison. Total student contact outreach could include duplicated student interactions where applicable.



**Figure 1: Second quarter 2017 summarization of outreach activities and communication by TE Advisors. In second quarter, “Contact Forms” (completed by students and collected by TE advisors) is a recently added category and will be included in future data. In comparison to the previous quarter results shown in Figure 2, the number of student contacts increased by 552 or 18.5%, however, the number of application and documentation assists increased by 50 or 77%.**

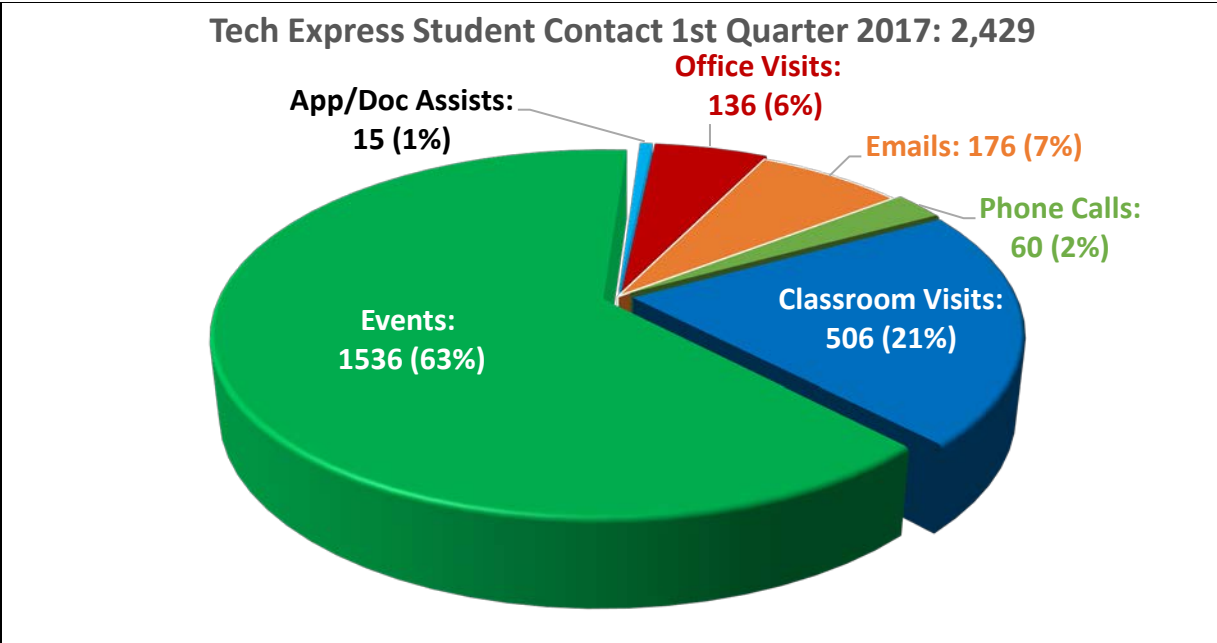


Figure 2: Summarization of Outreach Activities and Communication First Quarter 2017.

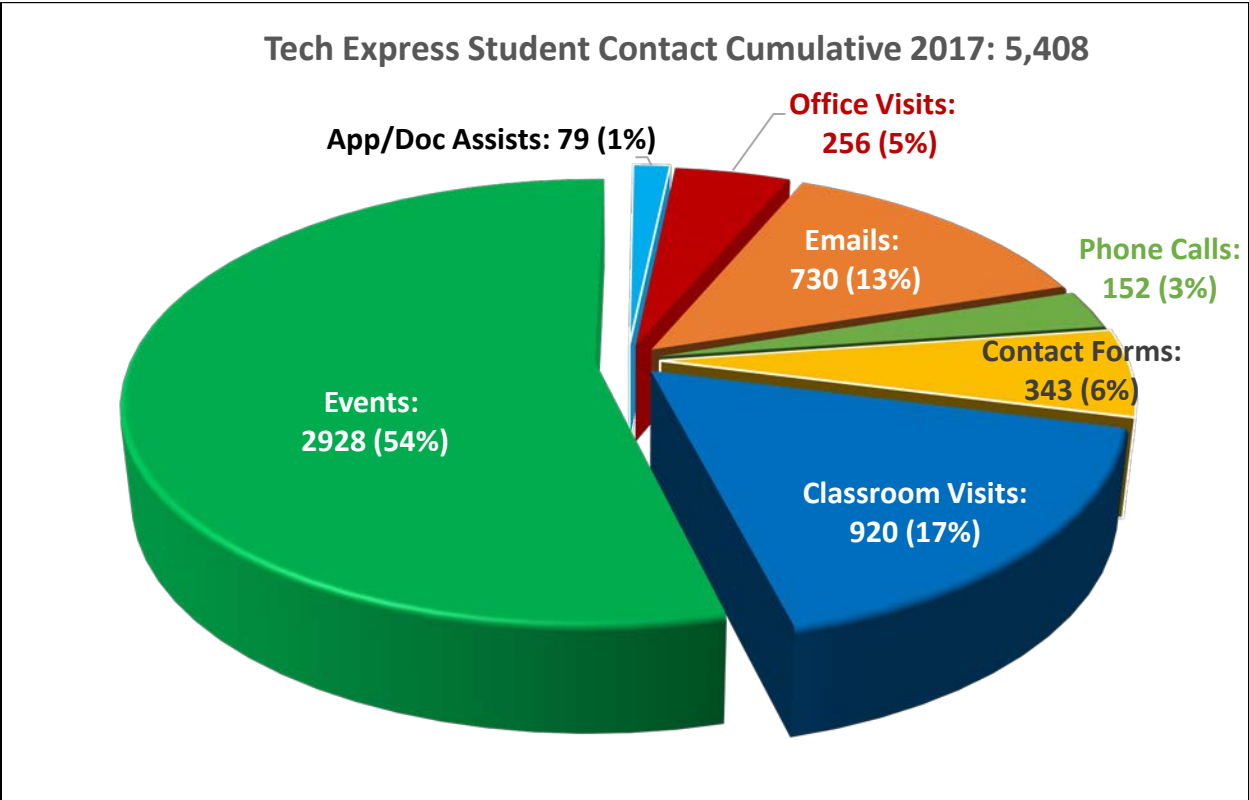


Figure 3: Orange and Osceola Counties student contact data represented in this chart is cumulative for first and second quarters. Averaging cumulative data for each county indicates Orange County = 87% and Osceola = 13% of total student contacts. TE advisors assisted 79 students in transitioning to Valencia during the first and second quarters. This is over three times the combined first and second quarter goal of 25 established by the AVP of CWE.

## Section 2B: Tech Express Contact Categories and Types of Activities

### Student Direct Contact Activities

- a. **Office Visits:** The total number of students seen one-on-one for general academic advisement in the Tech Express advisor's office. Student office visits include such activities as assisting students with completing Valencia application; discussing A.S. degree program options; answering questions and helping students prepare documentation for award of Valencia credit; and answering student's questions about how to transition to Valencia (120 or 4%).
- b. **Communications:** The total number of students communicated with via email or phone call to notify graduating students of program options and credit opportunities; set office appointments with students; answer questions; and follow up with students (646 or 22%).
- c. **Contact Forms:** Total number of individual student's contact information collected via sign-in sheets or completed forms submitted 1) to office while TE advisor out, 2) in the classroom, or 3) online. These forms are helpful for contacting and tracking students (343 or 12%).
- d. **Classroom Visits:** Total number of student connections in classroom. Visits to classrooms include formal and informal presentations to make students and technical instructors aware of Tech Express initiative and the role of TE advisors on each campus; to share information with students and instructors regarding articulation agreements that provide credit opportunities; and to offer OTC graduates assistance with transitioning to Valencia (414 or 14%).

TE advisors made 28 classroom visits. Examples include:

- 1) Supervision and Management for Industry A.S. Degree Presentations – Explained articulation for this A.S. degree to Welding program at Westside (*pictured below*) and Welding, Advanced Auto, and Diesel Mechanic programs at Mid Florida campus (various dates).



- 2) Program Graduate Information Sessions – Mid Florida, Orlando, Westside, Winter Park and TECO Campuses (various dates): Visited classrooms with adult program completers to provide information about articulations.
- 3) Dual Enrollment Classroom Visits – Mid Florida and Orlando Campuses (various dates): Visited classes with high school graduates to remind them of opportunities available at Valencia for graduates who complete the OTC program in which they are dual enrolled.

- e. **Application and Documentation Assists:** One-on-one and group interactions with graduating students to assist with enrollment and completion of Valencia applications and/or documentation for award of credit. Individuals completing the transition process are ready to come to Valencia and take advantage of articulation agreements and earned credit opportunities (64 or 2%). *Second quarter total of 64 represents an 87.5 percent increase over the previous year, a 77 percent increase over first quarter, and is over twice the target goal of 25 successful student interactions for 2016-2017 academic year.*

“Thank you so much! I didn’t know how to get the information I needed. Now I am accepted and have my schedule for fall...all thanks to you!”

Marketing Student-MFC

**Degree/Program breakdown of students assisted with applications and award of credit documentation resulting from Tech Express interaction in first and second quarters:**

Degree/Program	# of Students Enrolled
A.A. General Studies	3
A.A. General Studies (Pre-Nursing)	4
A.A. General Studies (pending RN program)	3
Advanced (Accelerated) Track Nursing	1
Baking and Pastry Management	1
Business Administration	2
Culinary Management	5
Digital Media Technology	4
Entertainment Design & Technology	1
Hospitality & Tourism Management	7
Interactive and Graphic Design	3
Medical Office Administration	6
Network Engineering Technology	4
Office Administration	3
Paralegal	1
Pre-Health Science	3
Restaurant & Food Management	1
Sound & Music Technology	2
Supervision and Management for Industry	24
Technical Certificates at VC	1
Cumulative Total	79

**Figure 2: Valencia Application and/or Award of Credit Documentation by Declared Degree Program for first and second quarters 2017.**

## Student Group Contact Activities

- a. **Events:** Total number of students exposed to Tech Express to Valencia initiative. TE advisors participated in and provided information at these events either individually or as a team (1,392 or 47%).
- 1) Senior Student Dual Enrollment Meetings - Mid Florida Campus (various dates): Presentation to remind graduating students of credit opportunities available at Valencia should they complete an articulated program at OTC.
  - 2) Career Pathways Fair – Mid Florida Campus (4/18/2017): Tech Express table at full day event attended by approximately 400 MFC students.
  - 3) Parent Academy – Evans High School (4/9/2017): Collaborated with CTE as exhibitor to approximately 250 parent and student participants.
  - 4) Career Fair – TECO (5/9/2017) Tech Express table at Career Fair attended by approximately 329 TECO students.
  - 5) Mid Florida Campus Tour (6/8/2017): Assisted with campus tour for 100 Duke TIP program students.
  - 6) Florida Electrical Apprenticeship and Training (FEAT) Graduation – Orlando Doubletree Hotel (6/10/2017): Attended electrical apprenticeship graduation of approximately 85 graduates.



## Miscellaneous Contact Activities

- b. **Stakeholder Contact Activities** (not directly student related) - Meetings with and presentations to stakeholders that provide information and opportunities to interact with leadership, administration, and faculty from OTC and/or Valencia (366 interactions):
- 1) Florida Electrical Apprenticeship and Training (FEAT) Focus Group – Mid Florida Campus (5/15/2017): Meeting with FEAT instructors to discuss outreach strategies for encouraging electrical apprenticeship completers to continue education to A.S. in Supervision and Management for Industry.
  - 2) Faculty and Guidance Counselor Meetings – Mid Florida, Orange, Winter Park, and Westside campuses (various dates): Meetings or focus groups with OTC faculty and guidance counselors to provide information on articulations.
  - 3) Articulation Meetings to discuss developing new articulation agreements between Valencia College and OTC.
    - Building Construction – Westside Campus (4/1/2017)
    - Sports, Recreation, and Entertainment Marketing – Mid Florida Campus (4/5/2017)
    - Joint Apprenticeship and Training Committee (JATC) – Mid Florida Campus (5/25/2017) - Meeting with apprenticeship directors to discuss articulation for A.S. in Supervision and Management for industry.
    - Robotics Summer Institute – Mid Florida Campus (6/27/2017) articulation to Electronics Engineering Technology with Robotics and Mechatronics Specialization program at Valencia.

## Section 2C: Ongoing Activities and Future Plans that Build the Partnership

### Ongoing Outreach Activities

#### a. **Campus**

- 1) Mid Florida, Orlando/Winter Park/Avalon, Westside and TECO campuses - information sessions regularly scheduled throughout the school year. Sessions tailored to provide information to students at different stages prior to completion.
- 2) Mid Florida, Orlando/Winter Park/Avalon, and Westside campuses - articulation meetings to develop new agreements.
- 3) Mid Florida, Orlando/Winter Park/Avalon, Westside campuses and off-site apprenticeship meetings to explore opportunities for credit for prior learning.
- 4) Mid Florida, Orlando/Winter Park/Avalon, Westside and TECO campuses - weekly classroom visits.
- 5) Mid Florida, Orlando/Winter Park/Avalon, and Westside campuses – attend monthly faculty meetings.
- 6) Mid Florida, Orlando/Winter Park/Avalon, and Westside campuses – attend campus Director’s meetings once a month.

#### b. **Student**

- 1) Continue educating high school students and counselors on articulated programs.
- 2) Recruit “graduating” adult students.
- 3) Meet with dual enrolled students completing programs prior to graduation.
- 4) Make brief presentations to dual enrollment classes.
- 5) Consider adding question on OTC application to identify students interested in coming to Valencia: “Do you plan to go to Valencia College when you complete your program?”
  - Used to identify students interested in attending Valencia once they complete OTC program.
  - Similar to **DirectConnect** question asked on Valencia application used to identify students interested in attending UCF after completing Valencia degree.

“Thank you for your help and support...you really have been helpful for me to narrow down what I want to study. Thanks for that.

GED Student – WPC

## New Initiatives and Processes

- Beginning fall 2017, TE advisors to attend OTC director's meeting once a month to ensure that communications and processes are consistent at each campus.
- Points of Contact for 2017-2018 are the Assistant Directors of Instruction (ADI):
  - Anita Gentz:
    - Orlando Campus – Tiffany Barnes
    - Winter Park Campus – Peggy Wilster
  - Francisco Perez
    - Westside Campus – Scott Weidl
  - Lisa Bliss
    - Mid Florida Campus – Felecia Boyd
- Create a team to guide students moving toward program completion through the graduation process.
  - Including TE advisors in the process will provide access and assistance to those who wish to transition to Valencia.
  - The team will be comprised of ADI, TE Advisor, Career Center personnel, and counselors on each campus.
- Provide TE Advisors with list of classes for students who are close to graduation.
  - Second year high school students in dual enrollment in junior and/or senior year.
  - Students graduating during the designated semester.
- Valencia Marketing and Strategic Communications team has introduced “concept” design ideas for Tech Express to Valencia, now under review.

## Future Data and Reporting

- Identify Valencia program courses (A.S., CCC) that could fit into the learning environment on each OTC campus.
  - Gives students options to continue their education in a convenient, familiar environment.
  - Strengthens commitment to students.
  - Deepens partnership.
- Valencia is currently working with OCPS IT for transfer of program completer/graduate data. This will allow Valencia to track and report:
  - Number of OTC students enrolled in Valencia programs.
  - Number of OTC students who completed Valencia programs.



# Bibliography

Career and Workforce Education (2017, June 15). *Advisory Councils & Partnerships*. Retrieved from Career & Workforce Education Web site: <http://valenciacollege.edu/academic-affairs/career-workforce-education/advisory-councils-partnerships/>

Hull, D. (2005). *Career Pathways: Education with a Purpose*. Waco, Texas, United States of America: CORD Communications.

National Association of State Directors of Career Technical Education Consortium. (2015). *The Career Pathways Effect Linking Education and Economic Prosperity*. Waco: CORD Communications.

National Center for Education Statistics. (2017, July 27). *Fast Facts - Educational Attainment*. Retrieved from IES>NCES National Center for Education Statistics Web site: <https://nces.ed.gov/fastfacts/display.asp?id=27>

Rubin, M. and L. Hood. (2004). *Priorities for Allocating Corporate Partnerships to Improve Education*. Champaign: University of Illinois at Urbana-Champaign.