

Florida Apprenticeship Workgroups Findings and Recommendations Report



June 2018



Submitted by:



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Florida Apprenticeship Workgroup Recommendations



Business Outreach

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Summary:

Florida's four vibrant industry sectors and diverse population presents an opportunity to produce a dynamic and highly skilled workforce by significantly expanding apprenticeship programs. However, many employers within the State are unaware or reluctant to undertake such a program.

To identify strategies for growing Florida apprenticeships, the Business workgroup held five committee and six sub-team meetings between October 2017 and April 2018. This effort culminated in nine recommendations dealing with:

1. Apprenticeship Data Collection & Dissemination
2. Building the Next Generation's Workers for the Construction and Trades Industry
3. Increasing Healthcare Apprenticeship Programs
4. "Strategies of Scale" for Information Technology
5. Growing Skilled Entry-Level Workers for the Manufacturing Industry
6. Tuition Fees for Registered Apprentices Through Local Education Agencies
7. Creating Outreach Materials Specifically Targeting Businesses
8. State Apprenticeship Advisory Council Members
9. Pre-Apprenticeship and Youth Apprenticeship Best Practice Models

In addition to these recommendations, the committee also produced many applied research studies to assist in quickly launching apprenticeship programs in each of the four key industry sectors. These studies compared Florida with other states to highlight the best practices of apprenticeship leaders and identified potential sponsors within Florida (by industry area). The Resources section provides additional information regarding this applied research.

Resources:

In order to produce these recommendation, the Business Outreach Group analyzed data on a number of topics, provided as separate Microsoft Excel files:

- Growth in Apprenticeships by State
- Florida Call Center Directories
- Help Desk Openings
- Florida Colleges Participating in Registered Apprenticeship

- Industry Advocates
- H1B Certifications
- Occupational Areas

These resources help to align existing apprenticeship program sponsors, identify business advocates and champions to target outreach materials with a value proposition, and foster linkages with statewide business groups and industry associations.

Recommendation #1: Apprenticeship Data Collection and Dissemination

Publish an annual report card which highlights regular, youth, and pre-apprenticeship growth and participation for the state.

Detail:

There is no performance data provided on the Florida apprenticeship site¹ and there are no links to the National site containing data for all the states.² Providing information on the number of participants and types of programs would reinforce the message to employers considering offering apprenticeship programs for the first time, especially to those in non-traditional occupations. This is best illustrated on the South Carolina Apprenticeship site.³ South Carolina has been very successfully in expanding its programs over the last few years by prominently displaying on the Apprenticeship homepage both year-to-year growth numbers, as well as company names and video profiles of apprentices' on-the-job videos. This has contributed to South Carolina's significant growth in active programs, ranked first among states over the last five years.

Annual statistics to consider including on the Florida website:

- Number of total and new apprentices
- Number of total and new programs
- Number of completers
- Annual growth
- Names of new occupations
- Names of new companies

¹ Florida Apprenticeship Programs; <http://www.fldoe.org/academics/career-adult-edu/apprenticeship-programs/>

² Apprenticeship Data & Statistics, ETA, US Department of Labor; https://doleta.gov/oa/data_statistics.cfm

³ South Carolina (Apprenticeship Carolina); <http://www.apprenticeshipcarolina.com/>

- Number of apprenticeship participants by gender
- Breakout of employers/sponsors by industry.

Recommended Action:

Determine the data to include in the annual report card and the location that is most visible for businesses and the public. Maintain a record of growth to show progress in five-year increments.

Recommendation #2: Building the Next Generation of Workers for the Construction and Trades Industry

Convene construction and trades industry champions to develop short and long-term strategies to increase the skilled labor pool in Florida using apprenticeship as a key strategy.

Detail:

The Construction sector is the largest and fastest growing within Florida, employing almost 530,000 workers, and increasing 43,900 in 2017.⁴ Over the next 10 years, the industry will need a major influx of new workers, as well as replacements for its retiring workers.

Nearly 21 percent of skilled construction workers in Florida are 55 or older, and 29 percent are 45 to 54 years old.⁵ In 2018, the industry will require 55,135 workers to fill open positions, of which, 44,751 will be replacements for individuals who will be retiring or otherwise leaving the industry.⁶ Unless this worker shortage is addressed, it soon will affect the overall economy of the state at a time when there is increasing emphasis on infrastructure and economic renewal by the federal government.

Florida needs a cohesive statewide strategy to bring more young people into this industry, and to improve the understanding among potential workers about the types of construction jobs and the many advancement opportunities available. In response, CareerSource Florida needs to be more involved in recruiting and supplying the industry with workers. CareerSource Florida should immediately work with other stakeholders to access out-of-school youth (ages 18-23) in order to engage and train them with relevant skill-sets. This includes designing skill ladders, including recognized industry certifications. Additionally, it should include expanded awareness campaigns directly focused on the target jobs market, as well as, developing pre-apprenticeship

⁴ December 2017 Current Employment Statistics (CES) data, Seasonally Adjusted, Florida Research and Economic Information Database application (FREIDA); <http://www.floridatrend.com/public/userfiles/news/pdfs/Dec17-Florida-employment-numbers.pdf>

⁵ Florida's surging construction industry faces worker shortage (21 Feb 2015);

<http://www.tampabay.com/news/business/realestate/floridas-surging-construction-industry-faces-worker-shortage/2218378>

⁶ EMSI (Industry Profile, 2/23/2018)

programs that can be operated in cooperation with other non-profits such as the Urban League, Boys and Girls Clubs, Florida Immigrant Coalition and the Young Men's Christian Association (YMCA).

Recommended Action:

1. Develop the industry strategy for a long-term solution with construction & trades champions leading the work.
2. Convene the leading construction associations and companies along with CareerSource Florida to develop a pipeline of workers.

Recommendation #3: Increasing Healthcare Apprenticeship Programs

Identify major healthcare organizations/associations within Florida that are willing to partner with state agencies to grow apprenticeships.

Detail:

There are currently very few healthcare apprenticeship programs in Florida. The Florida healthcare industry, employing over 1,045,000 workers in 2017⁷, is experiencing an acute shortage of workers in hospitals, clinics and other healthcare facilities. Annual healthcare openings in 2016 were 141,665, while the state's training providers only graduated 70,054.⁸

Between 2017 and 2025, the number of healthcare workers in Florida is expected to grow 15.0%, which is greater than the 14% forecast for the nation as a whole. This continuing gap will result in a shortage of over half a million of entry level workers during the period unless the state is able to produce more job-ready students. Apprenticeship is one possible solution with a proven history of success that can provide quality workers in a shorter time period than other traditional training programs.

Moving a highly regulated industry, such as healthcare, forward to consider a "new" training methodology for workers (like apprenticeships) would likely be more effective with a healthcare association as a partner and primary advocate. These organizations are keenly aware of the severe healthcare job shortages with their membership largely drawn from the same companies who are actively recruiting these workers. They also possess the funding, expertise and contacts with other useful partnering organizations needed to successfully launch

⁷ Included in Healthcare services are Ambulatory Healthcare (NAICS 621) with 487,441 estimated workers and 3,252 job openings in 2017; Hospitals (NAICS 622) with 364,151 and 7,572 job openings; and 193,498 workers and 1,857 job openings. Source: Florida Research and Economic Information Database Application (FRIEDA): <http://freida.labormarketinfo.com/vosnet/lmi/industry/industrysummary.aspx>

⁸ EMSI – Program Overview(CIP 51; statewide)

pilot projects, which can showcase the viability of apprenticeships to other companies who may not otherwise be inclined to offer them.

Potential healthcare organizations within the state to consider include the Florida Nurses Association, the Florida Association for Quality Healthcare, the Florida Healthcare Association, the Florida Hospital Association and the Florida Rural Health Association.⁹

Recommended Action:

1. Determine the healthcare association that is most critical, supportive and willing to work with apprenticeship growth in Florida.
2. Determine if there are initial resources to support an association willing to take on this work.

Recommendation #4: “Strategies of Scale” for Information Technology

Design and implement a “Strategy of Scale” to supply workers to the Information Technology industry.

Detail:

Information Technology (IT) occupations are prevalent in most Florida industries. Strategies need to quickly target a large variety of companies and technologies/skills to be both time and cost effective in order to address current and anticipated job shortages:

- Over 202,000 were employed as IT workers in Florida in 2017. Over the next 8 years the number of job openings is expected to total 140,270 (30,804 due to growth and 109,466 due to replacements).¹⁰
- During Fiscal Year (FY) 2016, Florida’s employers submitted 4,014 Permanent Labor (PL) and 20,409 H1-B Labor Conditional Applications (LCA), of which, the DOL certified 3,657 and 18,880 LCAs, respectively. The top-PL-certified Occupation was Applications Software Developers (887) paying an average wage of \$85,972 annually. The top 5 H1-B certified occupations were all IT-related: Computer Systems Analysts (12,177; \$71,834); Applications Software Developers (8,512; \$ 77,039); Computer Programmers (4,072;

⁹ For additional organizations: See the Directory of Associations; <http://www.directoryofassociations.com/>; and the Professional Association Finder; <https://www.careeronestop.org/BusinessCenter/Toolkit/find-professional-associations.aspx>.

¹⁰ Florida Department of Economic Opportunity (DEO), 2017 -2025 Statewide Employment Projection, Computer Occupations (SOC Code 15-1100); <http://www.floridajobs.org/labor-market-information/data-center/statistical-programs/employment-projections>

\$63,188); All Other Computer Occupations (2,977; \$71,177); and Systems Software Developers (2,462; \$85,727).¹¹

There are currently no IT apprentices in Florida to address these shortages, which necessitates a large scale, sustained initiative. Strategies to consider include:

- Working with IT associations around the state to launch a statewide apprenticeship initiative. Provide a monetary incentive for the first year of involvement.
- Identifying a principal association as an apprenticeship program sponsor which would select either one or two difficult to fill IT occupations. The ultimate goal is to involve at least 20 member-companies in the initiative.
- Contacting various staffing agencies which cater to the IT industry to serve as sponsors. In this capacity, they would also assist smaller companies in starting the program and recruiting apprentices. Provide a small incentive to assist them in the initial set up, as well as dedicated state staff that will complete the initial paper work and interact with other governmental agencies.
- Visiting companies that submitted H1-B Labor Condition Applications (LCAs) in previous years and assisting them in starting apprenticeships for their key occupations. As this strategy scales up (over the 3-year visa term cycle), it should increase the number of local workers while gradually reducing the reliance of employers on H1-Bs.
- Targeting the 169 Florida call centers which employ at least 20 workers. (Inbound and outbound)¹² for apprenticeship programs. This provides an option for persons with disabilities (among others) for meaningful employment, as well as the opportunity for some workers to independently work from home.

Recommended Action:

1. Determine the top ten national companies with IT apprenticeship programs and request their assistance with starting a new IT program in Florida.
2. Assign a full-time person with knowledge of the industry and apprenticeship to kick off initiative.
3. Determine which industry association will be the critical partner(s) for growth.

¹¹ Appendix A - Florida (page 61); https://www.foreignlaborcert.doleta.gov/pdf/OFLC_Annual_Report_FY2016.pdf

¹² D&B, The Million Dollar Database; <http://www.mergentmddi.com/> (1/14/2018)

Recommendation #5: Growing Skilled Entry Level Workers for the Manufacturing Industry

Accelerate the training of entry-level manufacturing workers in apprenticeship programs.

Detail:

The manufacturing industry has consistently experienced worker shortages for machine/production operation and maintenance personnel. In the most recent annual talent survey by the Manpower Group, these positions were among the top 10 most difficult to fill across all industries.¹³ Over the next 8 years, manufacturing jobs are expected to grow 6.3%, which is double that for the nation (3.0%).¹⁴

Apprenticeship programs are an excellent method for attracting and training workers, however, the current process is extremely tedious and time-consuming, especially for the manufacturing industry. Specific measures which can be implemented to improve the process include:

- Using competency-based curriculum to provide trainees the opportunity to move more quickly through the curriculum, as soon as they demonstrate individual skill competency; this has the potential for significantly shortening those programs for many of the trainees which have traditionally required over 5,000 hours.
- Employing “front-end” training to ensure immediate employability in positions, such as CNC beginning level operators in as little as 15 to 18 weeks (500 – 700 hours).
- Designing a statewide manufacturing apprenticeship program which allows companies to opt in without needing to approve company-specific programs.
- Ensuring industry-recognized certification testing is included as part of the training program.

Recommended Action:

Build on the work in Florida from the manufacturing sub-work group (and others). Determine if there is any funding available through a grant and/or the manufacturing community to help grow new models. This may be a statewide model supported by a substantial number of associations and companies.

¹³ “2016 – 2017 Talent Shortage Survey”, Manpower Group; <https://www.manpowergroup.com/talent-shortage-2016>

¹⁴ EMSI (Production Occupations SOC 51.0000; Florida; 2/19/2018)

Recommendation #6: Tuition Fees for Registered Apprentices through Local Education Agencies

Provide incentives to Local Education Agencies to grow apprenticeship programs.

Detail:

There are no tuition fees for apprenticeship-related instruction provided through Local Education Agencies (LEA) as stipulated in Florida Statute 1009.25.¹⁵ The only covered costs are for tools, books and materials needed for the trade. The program does not supply vouchers or loans for those seeking to participate in apprenticeship programs, nor are there stipulations for offsetting relocation expenses.¹⁶

While there is some funding for the local education agency through state reimbursement for classroom hour attendance as with any student, there is no recovery of tuition. Colleges may use funding for their existing workforce programs provided by the state to allocate toward apprenticeship tuition. As this may reduce funding for other longstanding workforce training commitments, there is very little benefit to an LEA for offering apprenticeship programs.

Recommended Action:

Initiate contact with the Florida Community College Association to support apprenticeship expansion within the state. Solicit their recommendations and assistance in funding apprenticeships, without reducing funding in other workforce training areas/programs.

Recommendation #7: Creating Outreach Materials Specifically Targeting Business

Develop advertising and informational materials using standard business processes and terminology. Include a simple high-level overview of apprenticeship programs, hiring and training information, and contact information for guides/representatives who can assist with completing the application and setting up the program.

¹⁵ The 2017 Florida Statutes, 1009.25 – Fee Exemptions, Online Sunshine;
http://www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=1000-1099/1009/Sections/1009.25.html

¹⁶ General Information Sheet on Apprenticeships, Florida Department of Education;
<http://www.fldoe.org/core/fileparse.php/5626/urlt/general-apprenticeship-information.pdf>. Also see – Para 10025 – Fee Exemptions, 2017 Florida Statutes;
http://www.leg.state.fl.us/statutes/index.cfm?mode=View%20Statutes&SubMenu=1&App_mode=Display_Statute&Search_String=1009.25&URL=1000-1099/1009/Sections/1009.25.html

Detail:

Companies need easily understood and assessable materials and guidance. Listed below are some of the topics that the outreach materials should include/address:

- Companies for which apprenticeships are beneficial – including those:
 - Experiencing worker shortages;
 - Providing extensive employee training programs; and
 - Supporting the ‘next generation’ of skilled workers through active mentorships.
- High-level graphic of the apprenticeship model and process
- Examples of successful apprenticeship programs in Florida - including pictures, quotes, and potential references/contacts.
- Contact information (name, phone number & email address) for the Apprenticeship Training Representative (ATR) and detailed discussion of how these individuals can assist employers in launching their programs.

Recommended Action:

1. Design print materials that targets businesses with the most critical and compelling information to gain interest; that will likely result in a call for a meeting.
2. Develop brochures, information guides, most frequently asked questions handouts and any other documents that are needed for the four key industries. Ensure the brochures and all materials can be downloaded from a variety of websites. (CareerSource Florida, Florida Department of Education, Florida Department of Economic Opportunity)
3. Complete a detailed review of best apprenticeship websites. Prepare data, visual materials and information to be presented on the site. Select a best-in-class vendor to design and implement the website. Ensure that all online information is consistent with that in brochures and other print materials.

Recommendation #8: State Apprenticeship Advisory Council

Add members to the State Apprenticeship Advisory Council that represent non-traditional apprenticeship industries. Ensure the Council is involved in critical apprenticeship planning for expansion and quality assurance.

Detail:

The current State Apprenticeship Advisory Council does not include representation from three of the four targeted industries in Florida.¹⁷ This appears to be the result of regulatory guidance which requires the majority of the 10-member council (8 members) to “represent industries that <already> have Registered Apprenticeship programs”.¹⁸ This effectively prevents the addition of any new members outside the Construction and Trades (CT) industry for the period of the appointment (4 years).¹⁹ With no representation on the Advisory Council, other high-visibility industries (healthcare, manufacturing and IT) have few state advocates for their own apprenticeship programs.

Additionally, it appears from the State Apprenticeship Advisory Council meeting minutes that the primary emphasis of the council is on reporting issues rather than strategic planning, program expansion and quality assurance. Although the Council does meet on a regular basis, the most recent minutes posted online are 9 months old (for the 18 July 2017 meeting). This delayed release of Council minutes significantly limits both public oversight, as well as interaction with potential apprenticeship employers.²⁰

Recommended Action:

1. Determine the feasibility of adding representatives of the other three target industries to the State Apprenticeship Advisory Council.
2. Until there is a way to modify the current council membership, convene an ‘informal’ group/committee for leadership and strategic planning for key industries outside of Construction & Trades.

¹⁷ <http://www.fldoe.org/academics/career-adult-edu/apprenticeship-programs/state-apprenticeship-advisory-council/members.stml>. Included are representatives of 4 employee and 4 employer groups; all are construction-trades related.

¹⁸ Para 446.045(2)(b), The Florida Statutes;
http://www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0400-0499/0446/Sections/0446.045.html

¹⁹ IBID

²⁰ Meeting archives are at: <http://www.fldoe.org/academics/career-adult-edu/apprenticeship-programs/state-apprenticeship-advisory-council/reports-meeting-reports/meeting-archive>. The last meeting was held on 17 Jan 2018. As of 19 Feb, the minutes for this meeting have not yet been published.

Recommendation #9: Pre-Apprenticeship and Youth Apprenticeship Best Practice Models

Examine the best practices of pre and youth apprenticeship programs across the U.S. to recommend a standardized model for use in Florida.

Detail:

Pre-apprenticeship and youth apprenticeship programs are valuable work-based learning opportunities.

Pre-apprenticeships are programs or a set of strategies, which prepare individuals to enter and succeed in one or more aligned Registered Apprenticeship (RA) programs. A quality pre-apprenticeship program is one that involves approved training and curriculum, strategies for long-term success, access to appropriate support services, career pathways/articulation to Registered Apprenticeship programs, and meaningful hands-on training which does not displace other workers.²¹

Youth apprenticeship programs generally meet the same criteria – the only difference is that students typically begin the training while still in high school. They take apprenticeship courses, in addition to their required high school coursework. These courses count towards high school graduation and students can participate as early as the ninth grade. Postsecondary credits are awarded based on signed articulation agreements between local school districts, postsecondary institutions, and RA Program Sponsors. The length of the program, which may continue after graduation, depends on the occupation’s standards, industry norms, and the type of program (Time-based, Competency-based, or Hybrid).²²

Pre-apprenticeship and youth apprenticeship programs have become increasing popularity in states such as Wisconsin, South Carolina, Maryland, Georgia, Colorado, Minnesota and Kentucky. Connecting young people to workforce training at an early age ensures they learn, maintain and expand those skills applicable to and transferable within the local labor market.

²¹ Training and Employment Notice #13-12, “Defining a Quality Pre-Apprenticeship Program and Related Tools and Resources”, 30 Nov 2012, Office of Apprenticeship, DOL-ETA; https://wdr.doleta.gov/directives/attach/TEN/TEN_13-12.pdf

²² Training and Employment Notice #13-16, “Framework on Registered Apprenticeship for High School Students”, 17 Jan 2017, Office of Apprenticeship, DOL-ETA; https://wdr.doleta.gov/directives/attach/TEN/TEN_13-12.pdf

In Florida, with 200,000 open jobs, of which 155,000 are entry-level positions,²³ apprenticeship programs can bring young people into the workforce much earlier than other traditional methods. This is critical with the increasing workforce shortages the state faces in all four of the targeted industry sectors: information technology, healthcare, construction and trades, and advanced manufacturing.²⁴

One recent example of a successful youth apprenticeship by Trident College involved over 42 youth apprenticeships connected to 36 different employers in seven career fields. When the participants graduated from high school, they received high school diplomas, technical certificates from the college and national apprenticeship credentials. They also had accumulated two years of paid work experience (and earnings) by working afternoons and weekends as a part of the program.²⁵

Recommended Action:

1. Begin work on examining the youth and pre-apprenticeship in the U.S. and determine the model that would work best in Florida, with modifications as appropriate to the Florida environment.
2. Identify who possible champions will be of the programs and involve them in the study and recommendations.

²³ Florida job postings, Indeed.com; 12 Mar 2018: <https://www.indeed.com>

²⁴ Brent Parton, "Youth Apprenticeship in America Today: Connecting High School Students to Apprenticeship", New America, Dec 2017; <https://na-production.s3.amazonaws.com/documents/Youth-Apprenticeship-Today.pdf>

²⁵ "Youth Apprenticeship Signing Day - June 25, 2014"; https://www.youtube.com/watch?v=huwWtIT_sVA

Workgroup:

Business

Chair/Co-chair:

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Arthur Hoelke (MFG - Team Lead)	Knight's Armament
Susan Biszewski-Eber (IT - Team Lead)	St. Petersburg College
Justin Barnhill (T & C - Team Lead)	Merritt Island Boatworks
Meghan Cochran (HC – Team Lead)	CareerSource Brevard

Members:

Name	Organization
Dennis Battistella	South Florida Manufacturers Association
Dan Belcher	NCCER
Tina Berger	CareerSource Brevard
Katherine Bonner	Senior Director Sector Initiatives, CareerSource Palm Beach County
Mary Jane Brecklin	Health First
Juan Pablo Camargo	Techno Aerospace
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Carol Craig	Craig Technologies
Dr. Diane Culpepper	Executive Director, Lake Technical College
Kathy Davis	Florida Department of Education, Vocational Rehabilitation (VR)
Judith Dunn	CareerSource Palm Beach County
Jeff Flick	EMF
Barb Glondys	American Health Information Management Association (AHIMA)
Ron Goss	Eckerd Connects
Erika Greene	Lake County Economic Growth Department
Dale Ketcham	Space Florida
Brad Kibbe	Florida Masonry Apprenticeship & Education Foundation

Name	Organization
Will Miles	CareerSource Okaloosa Walton
Paul Oppenheim	Matrix Composites
Jim Painter	Florida Concrete Masonry Education Council
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Dr. Stanley Sidor	President, Lake Sumter State College
Leonard Talbert	UA Local 719
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Christopher Valdivia	Baker Hughes
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Diane Williams	Black Knight
Boyd Worsham	Vice President, The Haskell Company
Brandy Ziesemer	Lake Sumter State College

Facilitator:

Susan Muha, Maher & Maher

Meeting Dates:

- October 12, 2017
- November 2, 2017
- December 11, 2017
- February 7, 2018
- April 16, 2018

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Data & Technology

June 2018



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Summary:

The Data and Technology Workgroup initially examined the various education and workforce data systems used in the state to gain an understanding of their purpose and the data they collect. A matrix was developed to provide a visual crosswalk of these related but separate systems. An unexpected and significant gap emerged related to how and what data is currently shared and who has access to it. This resulted in the Workgroup's recommendation for complete and easy access to apprenticeship information and data that is customized to the unique needs of various audience groups.

It was sometimes a challenge for the Workgroup to balance their focus and recommendations with what they determined was needed and what they believed was accomplishable. The recognized funding constraints and other parameters such as known federal database limitations served to shape the Workgroup's recommendations.

Resources:

- Goals, Objectives and Matrix of Existing Systems – see [Appendix A](#).
- Workforce Data Quality Campaign Registered Apprenticeship Data FAQs
https://m.nationalskillscoalition.org/resources/publications/file/Apprentice_FAQ_2pg_web.pdf

Recommendation #1: Develop a Comprehensive Statewide Web Portal

Detail:

The current Florida Department of Education Apprenticeship Programs webpages are outdated, lean on information and less than engaging. Some common concerns are that the website content is inadequate given the diverse needs for in-depth information for multiple audiences. The navigation is confusing and cumbersome, the design is text-heavy, and there is a lack of visual interest. Most importantly, it does not provide any reference to strategic planning, goals, milestones or Florida-specific initiatives, nor does it provide connectivity to resources such as those recommended below.

Recommended Action:

To expand apprenticeship in Florida, there is a strong need for a single, statewide, mobile-ready web portal where promotion of, and comprehensive information about, pre- and Registered Apprenticeship is housed and easily accessed. To ensure shared ownership and mutual benefit, the three core partners: Department of Economic Opportunity (DEO), CareerSource Florida and Department of Education (DOE) should jointly invest in the portal's design and development. The portal should disseminate, among other things, performance outcome data, return on investment (ROI) data, general information, "how-to" guidance/tutorials, and be built to deliver the most relevant and timely information targeted at the primary audience groups.

The latest and best practices in website design, development and content strategy should be used, and user experience should be a priority issue in the design. Thorough user research should be conducted to define the target audiences and the content they seek. User scenarios will further reveal the unique needs of the distinct audiences. The federal government provides user experience (UX) best practices and guidelines at:

<https://www.usability.gov/what-and-why/user-experience.html>

Although not complete or vetted, the Workgroup includes its initial thinking below on known audiences and some of the information each audience may seek:

- a) Potential apprentices, apprentices, interested parties (job seekers, students, parents, family), with a recognition of underrepresented populations such as women, minorities, military veterans, people with disabilities and youth:
 - Current apprenticeship opportunities searchable by location and occupation
 - Wages
 - Performance data
 - How to apply
- b) Sponsors, training providers, employers (potential employers, employers currently engaged in RA, intermediaries):
 - Step-by-step instruction to create an apprenticeship

- Ability to enter a zip code and connect with the person in the state office who can serve as a sponsor
 - How to recruit apprentices
- c) Stakeholders (unions, Chambers and other business associations, H.R. and staffing recruiters):
- List of sponsors, searchable by location
 - How to become a sponsor tutorial with step-by-step instructions
 - Links to unions that have available work
 - Provide Chambers with # of apprentices, # of completers
- d) Colleges & universities, career and technical schools, secondary school systems, training providers;
- Classroom training
 - Career ladders
 - Certificate and credential programs leading to apprenticeship
- e) State agencies, workforce investment boards, local service providers and legislators:
- Dashboard reports with comprehensive data including performance outcomes
 - “Big picture” view for legislators - # of completers, wages
 - Demographic information: age, race, gender, populations of focus (e.g. vets, youth)

Recommendation #2: Apprenticeship Glossary

Detail:

The world of apprenticeship uses its own distinct terminology and acronyms that are largely unknown to the general population. This creates a barrier for educators, employers, students and other interested parties who want to engage with apprenticeship. Currently, the Florida Department of Education’s website contains a non-specific glossary (<http://www.fldoe.org/schools/higher-ed/fl-college-system/glossary.stml>), and an Apprenticeship Toolkit with a list of acronyms (<http://www.fldoe.org/academics/career-adult-edu/apprenticeship-programs/apprenticeship-toolbox/acronyms.stml>), neither of which adequately provide comprehensive definitions as a single resource to meet the needs of the apprenticeship community.

Recommended Action:

Create a complete Apprenticeship Glossary containing all the terminology and acronyms used in apprenticeship with definitions that are clear, complete, and simple to understand. The glossary should be easily accessible on the web portal, using a tab or button in the navigation pane.

Recommendation #3: Distributed Knowledge Management System

Detail:

Data related to apprenticeships are contained in multiple databases (RAPIDS, or Registered Apprenticeship Partners Information Data Systems; Employ Florida; Department of Education Career & Technical Education; Salesforce and other local databases of various stakeholders). While each of the systems described above has its own data collection requirements and metrics for determining performance, the challenge is to devise mechanisms to use the data across program lines and devise joint metrics. For example, the apprenticeship, workforce and educational systems all work with employers, but there currently is no way to identify employers being served by multiple systems nor is there a way to identify underserved employers.

Recommended Action:

The Department of Economic Opportunity has access to the workforce data management system and the ability to share data with a variety of databases. These systems can collect data elements for their performance reporting. With appropriate modifications to the workforce data management (Employ Florida) system, apprenticeship data and reporting could be completed without making major modifications to Employ Florida or to the Florida Education & Training Placement Information Program (FETPIP).

Apprenticeship performance reporting could become a stratification of performance reporting within a Workforce Innovation and Opportunity Act (WIOA) framework. Outcome measures for consideration include the following:

- Credential Attainment (WIOA)
- Employed 2nd quarter and 4th quarter after Exit (WIOA)
- Median Earnings in 2nd Quarter After Exit (WIOA)
- Completion of Registered Apprenticeship (RA)
- Retention post-apprenticeship (RA)
- Measurable Skills Gain (appropriate progress)

For further information please see

https://m.nationalskillscoalition.org/resources/publications/file/Apprentice_FAQ_2pg_web.pdf

From a broader perspective, one consideration is an approach that puts a strong emphasis on data sharing and inter-agency collaboration, aligned with recent recommendations to the Secretary of Labor by the Workforce Information Advisory Council: [Recommendation 8: Create a 21st Century WLM System Using Advanced Technologies](#).

In the context of apprenticeships, such an approach for Florida may include development of a 21st century Florida Apprenticeship System based on a distributed knowledge management system (DKMS) that uses an open architecture/open data approach, artificial intelligence (AI)

and related advanced technologies to:

- make the system more accessible, dynamic, up-to-date and relevant for all users – jobseekers, employers, students, educators, workforce practitioners, researchers and policymakers;
- transform the Florida Apprenticeship System so that it provides knowledge rather than large volumes of information and data to decipher, and moves from a system of separate, centralized datasets or databases to one based on the concept of distributed data;
- infuse the Florida Apprenticeship System with more intelligent knowledge systems aligned with new protocols and technologies that include standardized schemas such as those found on www.schema.org, a joint open source venture of the major global search engines; and
- reduce the costs of software development, data production and data maintenance.

Why is this needed? Given the rapid advancement of these technologies over the last few years and the IT modernization goals of President Trump’s [*Executive Order 13794 – Establishment of the American Technology Council*](#), the time is right to examine the application of such technologies. AI and related technologies are currently being used in many private and public-sector applications, such as self-driving vehicles, language translation, image recognition, trip planning, digital tutors, electronic health records management and research, financial and contract transactions, and medical diagnosis, to name a few. Well-known implementations include IBM Watson and Amazon Alexa.

The proposed DKMS would not create a new set of data. An AI-driven DKMS would serve as a platform or interface that interacts with the underlying datasets, allows existing datasets to talk to one another, and provides users with a simpler, more useful and intuitive way to obtain information. Underlying datasets would remain as is, except to the extent that common data structures/schemas are needed to facilitate the DKMS ecosystem.

Recommendation #4: Improve Access to Data on Registered Apprenticeship

Detail:

There is uncertainty about how much information is available from the RAPIDS Registered Apprenticeship database for workforce and education partners. At the local level, there is a lack of data on active Registered Apprentices outside of the workforce system: the number of new apprentices, the number of completed apprenticeships and other related data such as credentials, demographics and positive outcomes.

Recommended Action:

Work with U.S. Department of Labor to obtain access to meaningful information about sponsors, employers and, if feasible, apprentices. If possible, improve transparency by capturing data on the large numbers of apprentices who are not currently entered into Employ Florida to share the performance of the apprenticeship program in its entirety, not just those the workforce system touches.

Workgroup:

Data & Technology

Chair/Co-chair:

Jennifer German, CareerSource Gulf Coast

Mark Hunt, Office of Career, Technical and Adult Education, Pinellas County School Board

Members:

Name	Organization
Donnie Casey	Machining Solutions
Stephen Dunnivant	Tallahassee Community College, Business, Industry & Technology
Diane Head	CareerSource North Florida
Sylvia Jackson	Gadsden Technical Institute
Angela Pate	Focused Management Solutions
Candace Phinney	Focused Management Solutions
Dr. Luis Pizarro	Lake Sumter State College
Michael Ramsey	Hillsborough County Public Schools
Thomas Rollins	George Stone Technical Center
Angela Sapp	Gadsden Technical Institute
Julie Terrell	Northwest Florida State College

Facilitator:

Linda Lawson, Senior Consultant, Maher & Maher

Meeting Dates:

Workgroup Meetings

November 2, 2017

December 7, 2017

January 4, 2018

February 1, 2018

April 5, 2018

Chairs Meetings

September 28, 2017

October 6, 2017

Appendix A: Goals, Objectives and Matrix of Existing Systems

ApprenticeshipUSA – Florida Data Sharing and Technology Workgroup Goals, Objectives and Matrix of Existing Systems

For **orientation to the project**, please review the [Florida Registered Apprenticeship Project Kickoff Webinar](#) recorded on Sept. 6, 2017.

Project Goals for All Workgroups:

1. Refine Florida’s apprenticeship strategies
2. Address the state’s critical need for skilled, underrepresented workers in Construction, Manufacturing, Healthcare and Information Technology sectors
3. Develop policy recommendations that support Registered Apprenticeship expansion, systemic innovation and responsiveness to employers and job seekers in underrepresented populations

Data Sharing and Technology Workgroup Objectives & Goals

The integration of existing Registered Apprenticeship participant and program tracking systems with the state’s workforce data system (Employ Florida).

1. Discover best practices for capturing data that is important to the three core partners
2. Better understand linkage opportunities across multiple databases, including Employ Florida, RAPIDS 2.0, Educational School and Program Data, and the Salesforce customer relationship management system
3. Make findings and recommendations for policy improvement and messaging in advance of the Apprenticeship Summit in June 2018
4. Innovative suggestions for integrating data systems and tracking apprentices

System	Housed By	Access	Data Collected	Reports/Output	Gaps	Challenges	Opportunities
RAPIDS 2.0	USDOL (owns) upkeep and data input by Department of Education, Office of Apprenticeship	<ul style="list-style-type: none"> • USDOL • State Director • ATRS RA Sponsors (limited view) 	Program Data: <ul style="list-style-type: none"> • Organization name • Contact information • Program number • FEIN • Trade/Occupation • RAPIDS codes for occupation • SOC Code • NAICS code • # of participating employers • Size of employers' workforce • Total journeyworkers • Female journeyworkers • Youth journeyworkers • Name of bargaining agency (if applicable) • National affiliation (if applicable) • Training type • Sponsor designee to receive complaints • Occupation type (time-based/hybrid/competency based) • RTI method • Related instruction provider type and information 	<ul style="list-style-type: none"> • Number of apprentices per state • Number of programs (active, inactive) • number of apprentices per program • Apprentice Type (Active/Completed) • Can get date ranges, so could look at information by quarter • Search page allows for ad hoc reports • Many report capabilities are not functioning yet <i>For example: splitting samples by gender, race</i> 	<ul style="list-style-type: none"> • Pre-apprenticeship • Demand side data • ATR • Standards can be built in RAPIDS, but the ATRs do not use this feature • Compliance reviews are missing from 2.0 	<ul style="list-style-type: none"> • RAPIDS 2.0 has been newly rolled out and is experiencing trouble creating reports. (reports should export to excel but this function is spotty) • Reports should export to excel • This feature works occasionally, but not consistently • FEIN may not be available from RAPIDS 	<ul style="list-style-type: none"> • RAPIDS 2.0 works with Salesforce to some extent • Standards may overlap with CTE program curriculum/competencies • USDOL will provide flat file of data to certain partners with no PII

			<ul style="list-style-type: none"> • When is RTI provided • Total length of RTI <p>Apprentice Data:</p> <ul style="list-style-type: none"> • Apprentice ID# • Sponsor ID# • Trade • Participating employer • Starting wage • Term • Starting date • Contact information • Optional SS # • DOB • Gender • Race/Ethnicity • Highest grade level • Veteran Status • Optional disability status 	and other demographic variables does not seem to work			
School & Program Data	DOE	DOE puts in data requests for information	<p>Education Data</p> <ul style="list-style-type: none"> • Post-education employment outcomes • wage rates • public assistance • School code • Program code • CIP codes • CIP to SOC crosswalk • Completion data 	Published annual outcomes reports	<ul style="list-style-type: none"> • Certifications awarded by industry • Data on students in private, for profit universities • Data on apprentice- 	<ul style="list-style-type: none"> • Data only for previous school years information. • Real-time data limited due to scheduled reporting periods (surveys) 	<ul style="list-style-type: none"> • Allows us to see progressive wage data for apprentices if they are recorded. • Can get enrollment data through FETPIP

			<ul style="list-style-type: none"> • Non-completers • CTE programs 		<p>ship programs that provide in-house Related Technical Instruction (do not use LEA) do not report enrollment to DOE</p>	<ul style="list-style-type: none"> • There needs to be a data collection process that identifies various data elements for apprenticeship programs that are not partnered with LEA's 	
Employ Florida	DEO/ LWDBS	Ad hoc reports are available on Employ Florida	<p>Job Seeker Data</p> <ul style="list-style-type: none"> • Resumes • Skills • Measurable skills gains reports • wages • Demographic information • Veteran Status • Education • Employment history • Assistance/ services • Unemployment services • Employers • Employer address and contact information • Worksite locations • Employer id 	Market trend reports	Connection of apprenticeship programs-to-employers-to-job seekers	Does not do much in tracking apprenticeship data. Should be able to differentiate Registered vs non-registered Apprenticeship	<ul style="list-style-type: none"> • Allows us to see employer need • Is adaptable

			<ul style="list-style-type: none"> • FEIN • Employer Tax ID • NAICS codes • SIC codes • Job orders • Job positions • Sector • Cluster codes • Products produced by employer • Benefits offered by employer • Skills required for employment • Market trends • Training providers and schools • Training programs • Eligible Training Provider list • Education program completers (LMI) 				
Salesforce	CS Network		<p>Employer Client Management System</p> <ul style="list-style-type: none"> • Exports data to excel • CSF uses it in multiple ways: <ul style="list-style-type: none"> - Track IWT/QRT - Applications - Business engagement 	<p>Reports can be generated on any field within Salesforce. However, Apprenticeship information is not captured within Salesforce</p>	<p>Level of technical and user literacy/training</p>	<ul style="list-style-type: none"> • Licensing fee • Workload analysis 	<p>Interfaces with Employ Florida</p>

			<ul style="list-style-type: none">- Business satisfaction surveys- CSF platform built in a few weeks <p>Employer Data:</p> <ul style="list-style-type: none">• Employer Name• Physical Address• Mailing Address• Phone• Point of Contact(s) and their contact info.• Website URL• Phone• FEIN• NAICS code• CSF Grants applied for and/or received• Service activities• Additional notes if entered				
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SCHOOL, SPONSOR & EMPLOYER INFO	RAPIDS	Employ Florida	Salesforce	Education Data & FETPIP
School Information		✓ (From DOE)		✓
Apprenticeship Sponsor	✓	(Could be employer or provider) *		(FETPIP information on RTI providers if they are state schools; WIOA providers)
RA Program number	✓	*		
Sponsor Contact Information	✓			
Employer	✓	✓ (Provider Location)	✓	
Employer Contact information	✓	✓	✓	
FEIN	✓ (Sponsor only)	✓	✓	
Industry	✓	✓	✓	
Occupations	✓	✓		✓
RAPIDS Occupation Codes	✓			
SOC codes/ O*Net	✓	✓		
CIP codes		✓		✓
NAICS codes	✓	✓	✓	
Number of employers participating w/ sponsor	✓	✓ (Provider Location)		
Number of employees per employer	✓			
Total workplace mentors	✓			
Total minority workplace mentors	✓			
Total female workplace mentors	✓			
Total youth workplace mentors	✓			
Bargaining agency (affiliated union)	✓			
National affiliation	✓			
Sponsor designee to receive complaints	✓			
Occupation type (time based/ competency/hybrid)	✓			

SCHOOL, SPONSOR & EMPLOYER INFO	RAPIDS	Employ Florida	Salesforce	Education Data & FETPIP
RTI Method (Physical space where RTI is provided)	✓			
Related instruction provider type (Sponsor classroom, Vocational School, Technical School, Community College, Web Based, etc.)	✓			
Related instruction provider contact	✓			
When is RTI provided	✓			
Total length of RTI	✓			
Worksite locations		✓		
SIC codes		✓		
Job orders		✓		
Job positions		✓		
Products produced by employer		✓		
Benefits offered by employer		✓		
Skills required for employment		✓		
Eligible Training Provider list		✓		
Employer Client Management System			✓	
Business engagement		✓	✓	
Business satisfaction surveys			✓	
CSF Grants applied for and/or received			✓	

*Apprenticeship information can be manually input in Employ Florida, but is not currently tracked or automatically uploaded.

APPRENTICE, STUDENT, PARTICIPANT INFO	RAPIDS	Employ Florida	Salesforce	Education Data & FETPIP
Apprentice Name	✓	✓		
Apprentice ID	✓			
Sponsor ID	✓			
Trade/Occupation	✓			
Starting wage	✓			
Exit wage	✓			
Term	✓			
Start Date	✓			
Contact information	✓	✓		
Optional SS#	✓	✓		✓
DOB	✓	✓		✓
Gender	✓	✓		✓
Race/Ethnicity	✓	✓		✓
Age of participant	✓	✓		✓
Optional Disability	✓	✓		✓
Veteran Status	✓	✓		✓
Employment history		✓		
Educational Level	✓	✓		✓
Public assistance		✓		✓
Other barriers to employment		✓		
School completion				✓
Program completion data	✓	✓		✓
Training occupation	✓	✓		✓
Resumes		✓	✓	
Job seeker skills		✓		
Measurable skills gains reports		✓		
Activities/ services		✓		
Re-employment assistance		✓		

APPRENTICE, STUDENT, PARTICIPANT INFO	RAPIDS	Employ Florida	Salesforce	Education Data & FETPIP
Non-completers data (student outcomes when they leave a program)				✓ (FETPIP – Incomplete)
Post-education employment				✓ (FETPIP)
Post-education average wage	✓	✓		✓ (FETPIP)
Post-education public assistance				✓ (FETPIP)

Florida Apprenticeship Workgroup Recommendations



Population Outreach

June 2018



Submitted by:



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Summary:

The Population Outreach workgroup under the leadership of Jim McShane and Co-Chair Jim Haugli determined it would be important to first identify the key special populations and then determine the best practices for apprenticeship programs with each group. Florida will be able to review the information and determine which of these ideas are the most important given currently available resources.

The workgroup met five times during the duration of the project and developed the following nine recommendations:

1. Work with Florida call centers, independent helpdesk operators and work-from-home companies to provide employment for underrepresented populations, particularly women and the disabled.
2. Allocate part of the State Apprenticeship Expansion Grant to increase participation of underrepresented populations in newly developed apprenticeships in the four target industries. Vocational Rehabilitation (VR) should work with workforce boards to implement an interagency team approach that will address recruitment and selection of participants. This will produce a partnership process/model to increase participation for persons with disabilities.
3. Review national and international best practice for providing employment opportunities for individuals with disabilities. Develop a plan that works within the Florida environment, culture and funding options to support the individuals in new apprenticeship opportunities.
4. Develop pre-apprenticeships for ex-offenders in skilled trades and advanced manufacturing occupations that include significant soft skills, safety training and basic entry level skills. Engage businesses and educational organizations for curriculum development. Partner with CareerSource Florida to assist with coordination, referrals, sector strategies and job placement.
5. Ensure awareness of apprenticeship opportunity for ex-offenders by distributing flyers/rack cards to law enforcement, probation and parole, and juvenile justice agencies. Post on social media sites, career centers and throughout the community.
6. Support high quality pre-apprenticeship programs for women, including the following key elements to ensure success: extensive outreach, strong candidate pool, multiple hurdles approach to program entry, standardized curriculum/program content, industry entry (whether direct or delayed) and adherence to U.S. Department of Labor Training and Employment Notice 13-12.
7. Delete the categories of occupations currently excluded from participating in apprenticeship by Statute 446.092 (selling, retailing or similar occupations in the

distributive field, managerial occupations and professional and scientific vocations for which entry requirements customarily require an academic degree). Until that action occurs, issue a guidance, if needed, to encourage apprenticeship development in all occupations that industry supports.

8. Apply best practices for reaching the Hispanic/Latino population in Florida for Registered Apprenticeship programs and careers: increase apprenticeship staff/representatives in schools, organize apprenticeship career fairs and meet with parents. Start a pre-apprenticeship or youth apprenticeship program.
9. Explore youth apprenticeship and a best practice model that will work in Florida, providing recommendations and actions for next steps in launching a program. Actively engage Florida champions from business and the K-12 system as the leads for this initiative.

Additionally, the work group identified several information resources that may be helpful as the Florida team continues working on apprenticeship growth.

Resources:

The population drop box contains information in the “Additional Resources” folder, including articles, studies, reports submitted by workgroup members regarding special populations, and apprenticeship programs. Specific subject-areas include:

- Apprenticeship Training Representative (ATR) regional updates
- A Benefits & Cost Road Map for Apprenticeship
- Enrollment Numbers for Women in Florida Apprenticeships
- Federal Resources Playbooks
- An Overview of Florida Child Labor Laws
- How to Get Started with Pre-Apprenticeships
- Highlights of Kentucky’s Grant-In-Aid Program
- Hiring of Mentors in Michigan
- Utilizing Student Learning Waivers
- Work-at-Home Opportunities

Recommendation #1: Coordinate with Businesses to Fill Demand for Remote Workers with Underrepresented Populations

Work with call centers, independent helpdesk operators and work-from-home companies to provide employment opportunities for underrepresented populations, particularly women and the disabled.

Detail:

Six of the nation's 25 largest call centers are in Florida: Progressive Insurance (Tampa - 3,500 employees); Florida Blue (Jacksonville - 3,000); Citigroup (Tampa – 3,000 and Jacksonville – 2,500); PwC (Tampa – 2,200); and USAA (Tampa – 2,000).¹ Over the last five years, Florida has also generated over 10,000 additional jobs by opening 34 new call centers.² Among U.S. metropolitan areas with the largest number of call center employees, Tampa and Orlando are ranked 4th and 9th with 69,189 and 41,447, respectively.³

Florida is also one of the largest employers of Help Desk Technicians (HDTs), fourth among all states in 2016.⁴ Between 2017 and 2025, the number of HDTs is expected to increase 24% from 35,892 to 41,690, significantly more than the average (11%) for the overall state.⁵ On January 11, 2018 there were 131 Florida helpdesk positions posted on Indeed.com.

Over the next 10 years, the number of call center and IT personnel operating remotely from home is predicted to double. Much of this increase will be due to “large numbers of skilled people, semi-retired from other industries or particularly disabled working past age 65, willing to work part-time, without benefits to supplement their incomes.” These individuals will require higher skill levels, especially for telecommunications, technical and software related help desk contracts.⁶ Specific growth areas include:

¹ “Top 25 Largest Call Center and Regional Operation Centers in the United States”, Site Selection Group, 27 Mar 2017; <https://info.siteselectiongroup.com/blog/top-25-largest-call-center-regional-operations-centers-in-the-united-states>

² King White, “Top 20 States for New Call Center Projects in the last 5 years”, Site Selection Group, 23 May 2016; <https://info.siteselectiongroup.com/blog/top-20-states-for-new-call-center-projects-in-last-5-years>

³ “Leading metro areas with the largest number of Call center workers in the United States as of June 2017”; Statistical; <https://www.statista.com/statistics/580586/states-with-the-highest-employment-call-centers-us/>

⁴ “Occupational Employment and Wages, May 2016: 15-1151 Computer User Support Specialists”, U.S. Bureau of Labor Statistics (BLS); <https://www.bls.gov/oes/current/oes151151.htm#st>. In the current Occupational Outlook Handbook, “computer support specialists” are also called “help desk technicians”.

<https://www.bls.gov/ooh/computer-and-information-technology/computer-support-specialists.htm#tab-2>

⁵ “2017 -2015 Statewide Projections”, Florida Department of Economic Opportunity (FL DEO);

<http://www.floridajobs.org/labor-market-information/data-center/statistical-programs/employment-projections>

⁶ “Call Center Trends a Glimpse at Developing Issues, Technologies, and Trends”;

<http://media.haworth.com/asset/28521/Call%20Center%20Trends%20White%20Paper.pdf>. Also – see the Population group drop box for information about the top 100 companies offering flexible jobs in 2016.

- University integrated connectivity and services for facility, staff, services, students and alumni
- Health-related services
- Debt collection
- Gaming (interactive, multiple players, gambling)
- Insurance
- Financial services/banking
- Technology sales and supporting services
- Email, web self-serve, multimedia information exchange

Florida needs to develop a strategy to work with companies to supply workers to meet the enormous demand for these workers. Specific steps to consider include:

1. Visiting employers and temporary staffing agencies to address the need.
2. Developing and implementing a front-loaded apprenticeship training program to supply workers in 12-15 weeks. Start with a boot camp training model, which includes either Helpdesk Desk Institute (HDI) or Comp-TIA certification to assess and verify skill attainment.
3. For those programs requiring at least six months for implementation, start with a boot camp and a four-to-eight-week internship to supply workers in the interim.

Recommended Action:

1. Visit employers and staffing agencies to determine who will be the early adopters of a proven workforce strategy such as apprenticeship.
2. Determine if a staffing agency would be a good sponsor for some of the smaller companies.
3. Develop and implement a frontloaded apprenticeship-training program to supply workers in 12 to 15 weeks. Start with a boot camp training model [30-40 hours per week Related Training Instruction (RTI)] include either a Help Desk Institute (HDI) or Comp-TIA certifications to verify skill attainment via a certification. This will supply a steady stream of workers throughout the year.

Recommendation #2: Provide Funding to Promote Participation of People with Disabilities

As part of the activities under the \$1.5 million State Apprenticeship Expansion (SAE) grant, a portion of these grant funds could be used to increase the participation of underrepresented populations in newly developed apprenticeships in the four targeted areas. Vocational Rehabilitation (VR) should work with the local workforce development board awardees to implement an interagency team approach that will address the recruitment and selection of apprenticeship participants. Award amounts up to \$100,000 could be made available through the SAE grant.

Detail:

Nationally, there have been few federally funded Registered Apprenticeship (RA) grants focused on people with disabilities. Engaging employers and industry sectors to offer apprenticeships can be a challenge because developing an apprenticeship program can be costly without public assistance.⁷ Circumstances in Florida are very similar in that persons with disabilities are a vastly underserved by apprenticeships because employers fear taking on higher training costs. Yet workers with disabilities may be entitled to additional funding and often prove to be motivated employees.

Currently, VR and other sources of financial support are accessed as an afterthought when someone is approved to participate in an apprenticeship. It would be advantageous for Vocational Rehabilitation, (VR) to work as a team with local CareerSource Florida partners to revise the application and selection criteria for apprenticeships (based on number of participants) for the inclusion of individuals with disabilities. VR would be able to assist with the cost of participation for any eligible individual with a disability which would provide some sustainability for apprenticeships beyond the life of current grants or other time-limited/non-recurring SAE funding.

Recommended Action:

Allocate funding from the State Apprenticeship Expansion grant to develop an interagency team approach with Vocational Rehabilitation (VR), and CareerSource Florida to revise applications and selection criteria for apprenticeships (based on the number of participants) for the inclusion of individuals with disabilities.

⁷ "Registered Apprenticeship Programs: Improving the Pipeline for People with Disabilities", pages 10 & 18, Office of Disability U.S. Department of Labor, Jul 2015; <https://www.dol.gov/odep/pdf/ApprenticeshipReport.pdf>

Recommendation #3: Opportunities for People with Disabilities

Review national and international best practices for providing employment opportunities to individuals with disabilities. Develop a realistic plan that works within the existing Florida environment, culture and funding constraints. The approach could either expand existing programs or involve the replication and adoption of other nationally and internationally recognized models.

Detail:

There are a limited number of scalable programs, both nationally and internationally, to benchmark regarding best practices for individuals with disabilities. Current trends are toward occupations that allow persons to work with computers and/or customer service positions. There are several programs across the U.S. that provide customer service, as well as call centers and support service jobs that can include home-based employment. This is an area worthy of exploration in Florida given the significant number of call centers and computer support operations across the state.

One project to explore which has received international recognition from the European Association of Service providers for Persons with Disabilities (EASPD) is the Youth Transition Program, a collaborative school-to-work transition program that serves over 1,300 young adults with disabilities in 120 high schools statewide in Oregon. The purpose is to prepare young adults with disabilities for employment or career-related post-secondary education. This project focuses on the rights of persons with disabilities.⁸

Another EASPD best practice model is the Project Search initiative from the Cincinnati Children's Hospital Medical Center. This program provides education and training to young adults with intellectual and developmental disabilities through an innovative workforce and career development model. The program offers real life work experiences with training in employability and independent living skills. It is a business-led, one year, school-to-work program, which takes place entirely in the workplace. The most important criterion for acceptance into Project Search is a desire to achieve competitive employment. Students receive training and guidance for a full school year while working for the sponsoring firm. The business provides access to an onsite classroom that can accommodate up to 12 students, staffed by a special education teacher and one to three job coaches.⁹

⁸ "10 BEST PRACTICES in employment support for people with Disabilities", European Association of Service providers for Persons with Disabilities (EASPD), Page 15, 27 Sep 2013;

http://www.easpd.eu/sites/default/files/sites/default/files/PressReleases/annex_3_10_best_practices.pdf

⁹ Ibid, page 11. For additional best practices for employing the disables, see additional cases in the "10 Best Practices" document cited in the previous footnote.

Recommended Action:

Study best practice employment programs such as those in Oregon and Cincinnati. The goal is to determine if there are elements that can be incorporated in a strategy for providing services that will help access apprenticeship opportunities for persons with disabilities.

Recommendation #4: Pre-Apprenticeships for Ex-Offenders

Develop pre-apprenticeship programs for ex-offenders in skilled trades and advanced manufacturing occupations. Engage businesses and educational organizations in curriculum development. Partner with CareerSource Florida organizations to assist with coordination, referrals, sector strategies and job placement.

Detail:

Studies show that apprenticeships are a great option for ex-offenders. Apprenticeships offer second chance employment, the opportunity for ex-offenders to earn while they learn and the chance to obtain job skills that are in demand in today's economy. According to a 2016 Talent Shortage Survey conducted by Manpower, of 42,000 employers surveyed nationwide, 40% indicated a shortage of talent supply. The survey indicates that the hardest to fill positions are in skilled trades and manufacturing. Employers are turning down contracts due to the inability to fill current positions.

Workforce GPS makes the benefits clear:

Registered Apprenticeship offers a pathway to a long-lasting career. This type of sustainable career is vital for individuals who have spent time incarcerated. Living as an ex-offender can make finding employment especially difficult, and the longer an ex-offender goes without a job, the more likely they are to recidivate. A stable and well-structured job, such as can be found through apprenticeship, offers the best path away from crime and towards becoming a self-sufficient member of society.¹⁰

Short-term apprenticeship coaching programs can encourage rapid earning potential, enhance self-esteem, reinforce career choice and assist the ex-offender during their readjustment to society. Washington State Department of Corrections may be one to emulate. In their Trades Related Apprenticeship Coaching (TRAC) program, ex-offenders are prepared for competitive entry into union apprenticeship programs for carpenters, laborers and iron workers. The TRAC program is designed to provide work training in non-traditional jobs for women offenders.

¹⁰ "Expanding Apprenticeship for Ex-Offenders", Workforce GPS, <https://apprenticeshipusa.workforcegps.org/resources/2017/03/10/14/07/Expanding-Apprenticeship-for-Ex-Offenders>

Education and job training is provided through the TRAC program and tout recidivism rates of less than 5% for graduates which is far better than the average recidivism rates. Aside from the hands-on career training and education offered through apprenticeships, other benefits include the pathway to a successful long-term career with a competitive salary and little or no educational debt. The credential earned is also portable and is typically accepted by many industries and employers across the U.S.¹¹

Recommended Action:

Determine the cost and time to implement/expand this program for ex-offenders and the champion to develop and lead this initiative.

Recommendation #5: Expand Awareness for Ex-Offenders

Create flyers and/or rack cards to distribute to law enforcement, probation and parole, juvenile justice agencies, etc. to provide awareness of a pre-apprenticeship programs for ex-offenders. Post on available social media sites, websites, career centers and throughout the community.

Detail:

Flyers and rack cards are an inexpensive means of distributing information to a wide group of people.

Recommended Action:

1. Design a flyer and/or rack card that contains an overview and inviting statement on available apprenticeships, how to get started, services available, who to contact for more information and how to apply.
2. Send the flyers/rack cards to community partners, churches, law enforcement, probation and parole, juvenile justice agencies, career centers, and place throughout the community.
3. Post flyers/rack cards on social media sites, career center and partner websites, law enforcement sites, etc.
4. Add testimonials to flyers, social media and partner web sites. Meet with law enforcement, probation and parole, and juvenile justice agencies annually to share success data and encourage distribution of the flyers.

¹¹ TRAC Program Brochure, Washington State Correctional Industries,
<https://www.washingtonci.com/skin/frontend/WACI/primary/docs/content/about-ci/trac-program-brochure.pdf>

Recommendation #6: Pre-Apprenticeship for Women

Pre-apprenticeship programs for women need to be expanded to include the key elements for success. These include extensive outreach, a strong candidate pool, using a multiple hurdles program approach, standardized curriculum/program content and direct or delayed industry entry process.

Detail:

Most pre-apprenticeship programs have traditionally been in the construction and trades (CT) industries. Only recently has there been an emphasis in healthcare, information technology (IT) and advanced manufacturing; consequently, there are relatively few successful programs in these industries to replicate. As a result, the most important attributes for success need to be generalized and based on examining women's construction trades programs. A review of five "best practice" women's programs ¹² indicates several obvious common attributes/elements to success:

- **Extensive outreach and recruitment to ensure a strong candidate pool.** Recruit at least four to five times as many people as there are openings in the program. Utilize the following:
 - Community orientation meetings and workshops
 - Flyers in grocery stores
 - Presentations at unemployment offices
 - Presentations and meetings at one stop career centers
 - High school career fairs
 - Reach out to athletic teams
 - Flyers and presentations at churches
 - Ads and articles in newspapers targeting minority populations
 - Social media campaign
 - Targeted flyers and website information with photos of the intended audience included

¹² Attributes identified by thoroughly reviewing several case studies concerning CT pre-apprenticeship programs highlighted on the National Center for Women's Equity in Apprenticeship and Employment: <http://womensequitycenter.org/best-practices/> . Included were the following: "[Bridging the Gender Gap: Creating a National Pre-apprenticeship Program to Prepare Women for the Iron Working Industry](#)"; "[Massachusetts' Supply & Demand Strategy: A successful Model for Increasing Gender Diversity in the Trades](#)"; and "[Forging Gender Equity in the Sheet Metal Workers Local 28: The importance of Leadership, Goals and Regular Review](#)"

- **A “multiple hurdles approach to program entry.”** Candidates must meet certain requirements to be accepted into the program. Some not initially accepted may enter later in different cohort groups. Key guidelines for participants:
 - Attend an orientation session and be present at least 5 minutes prior to the start time. Door locks at the start time.
 - Pass an entry exam which usually includes an 8th - 10th grade level of math. (Some programs use a Work Keys silver level test score)
 - Pass a drug test
 - Pass a background check (a record does not necessarily disqualify a person, it depends on the issue)
 - Appear for an interview for the program
 - All deadlines and requirements must be on time with the submission of information, records and information for program acceptance. Candidates will not be prompted.

- **Standardized curriculum and program content.** Most programs contain industry approved entry core-level skills, as well as workplace orientation training to ensure smooth onboarding. Key components for construction and trade include:
 - Construction math
 - Blueprint reading
 - Use and recognition of tools
 - OSHA training
 - First aid
 - Visits to worksites to gain hands-on experience
 - Orientation to the workplace, expected behavior and other soft skill requirements

- **Industry entry after pre-apprenticeship.** This may involve direct entry or delayed entry (requiring bonus points and/or passing additional certification exams).
 - Some CT unions offer direct entry upon successful completion of all phases of the pre-apprenticeship program
 - In some programs, graduates who pass all phases of the pre-apprenticeship program successfully will obtain bonus points to enter an apprenticeship program. They will be accepted if they pass the union apprenticeship test and basic requirements.
 - When designing/developing a pre-apprenticeship program, it is advantageous to develop a memorandum of understanding with the industries and unions. Most

of the programs benchmarked had some type of agreement in place and were integrally involved and working together.

Recommended Action:

Ensure new pre-apprenticeship programs being developed for women include the elements and steps that have nationally resulted in successful placement into apprenticeships. The common elements and steps work for a program in any industry, including IT, healthcare and manufacturing.

Recommendation #7: Address Exclusion of Specific Occupations

Delete the categories of occupations currently excluded from participation in apprenticeship by Statute 446.092 (selling, retailing or similar occupations in the distributive field, managerial occupations and professional and scientific vocations for which entry requirements customarily require an academic degree). Until that action occurs, issue a guidance, if needed, to encourage apprenticeship development in all occupations that industry supports.

Detail:

Restricting the occupations from apprenticeship in selling, retailing or similar occupations in the distributive field, managerial occupations, and professional and scientific vocations for which entrance requirements customarily require an academic degree; penalizes businesses and individuals that would benefit by this workforce solution.

Colleges have developed new certificate, associate and baccalaureate programs for a large number of occupations in the last 10 to 15 years. Even so, many companies do not require degrees; they are more interested in the skills. Some of the occupations in healthcare that do not require a certificate or degree include phlebotomy, medical assisting, community healthcare worker, billing and coding specialist, and medical administrative assistant. Over the past 20 years, Information Technology has relied on both pathways certifications and degrees. These employers will often hire based on experience and certifications. Since colleges have added more IT programs, this should not disqualify these occupations from being able to be considered for an apprenticeship. This includes computer maintenance technician, coder, programming technician, helpdesk, analysis, customer support specialist and database administrator.

Recommended Action:

1. Determine steps to modify the statute.
2. Before the statute is modified; develop a guidance that provides clarity regarding occupations that are eligible for apprenticeship programs and announce it publicly on the websites of the Florida Department of Education, CareerSource Florida and the Florida Department of Economic Opportunity.

Recommendation #8: Opportunities for Hispanic/Latino Youth

One of the more promising best practices for reaching the Hispanic/Latino population of Florida is recruitment through the schools. Increase apprenticeship staff/representatives in schools, organize career fairs, meet with parents and start a pre-apprenticeship or youth apprenticeship program.

Detail:

In the 2010 U.S. Census, Hispanics and Latinos of any race were 23.2% of Florida's population. New population data from the U.S. Census Bureau shows that in five years, Florida's Hispanic population grew 18 percent overall — six times more than non-Hispanic whites, and more than twice as fast as African-Americans. This is a huge workforce that will need new opportunities to successfully join the Florida economy. The Registered Apprenticeship program is an opportunity that this fast-growing segment of the Florida workforce needs to enter.

Information regarding the salaries, free training and other benefits needs to be shared with high school students and their parents to help them make informed choices regarding their plans after high school.

Recommended Action:

1. Apprenticeship staff/representatives visit schools and explain the apprenticeship program, as well as how to get into the programs and what the benefits are.
2. Organize field trips to apprenticeship career fairs to expose participants to all the trades and what the academic level needed is to be successful in these careers.
3. Meet with parents to inform them about the programs that their children are eligible for at no cost. 4 and 5-year Registered Apprentice programs have been around for decades and there is no better time than now to get into the skilled trades. Invite parents to the career fairs that are offered so they can see what is available to their children.

4. Start a pre-apprenticeship program that will focus on the careers of most interest to students.
5. Target students already enrolled in Tech programs and/or Migrant Education Programs.

Recommendation #9: Youth Apprenticeships

Actively engage in locating the initial Florida champions from businesses and the K-12 system to explore youth apprenticeship and a best practice model that will work in Florida, providing recommendations and actions for next steps in launching a program. These programs function to decrease the drop-out rate and provide minority populations and young women with access to careers with higher wages.

Detail:

Youth apprenticeship programs are an underutilized option for connecting business and education. This model integrates classroom instruction and on-the-job training. Apprenticeship programs are becoming more formalized across the United States. These programs meet the same criteria as Registered Apprenticeship programs. This model in most states provides the classroom instruction during the last two years of high school, many times at a community college in the afternoon with on-the-job training on a Saturday, or one or two afternoons after school or during the summer.

There are currently ten states that have youth apprenticeships: Washington, Colorado, Wisconsin, Illinois, Kentucky, Ohio, Maryland, North Carolina, South Carolina and Georgia. The participation in many of the states are only in the hundreds, largely because they were implemented recently. Georgia and Wisconsin have much larger programs (in the thousands) and are supported by state funding through legislative efforts.

There are several advantages for both the student and the employer. Students earn college credit while still in high school and are immediately employed, thereby avoiding huge amounts of debt. The huge advantage for industry is that there is a steady pipeline of well-prepared workers, reduced hiring costs, retention benefits and improved workforce morale.¹³

¹³ Brent Parton, "Youth Apprenticeship in America Today: Connecting High School Students to Apprenticeship", New America, 14 Dec 2017; <https://www.newamerica.org/education-policy/policy-papers/youth-apprenticeship-america-today/>

Recommended Action:

1. Locate economic development agencies/chambers of commerce or similar organizations that can recommend champions in the local business and education community wanting to explore youth apprenticeship models. Identify at least one community in each of the four CareerSource Florida territories and publish an open RFP process available to every school district or economic development agency.
2. Provide “small exploration” grants of approximately \$50,000 for those four communities to visit the state to provide the opportunity for more detailed information on starting a youth apprenticeship program. The remainder of the money would be used to develop the implementation plan for the school district, which would require a small match (i.e. \$10,000) from the local community.

Workgroup:

Population

Chair/Co-chair:

Jim McShane	Chairman	CareerSource Capital Region
James Haugli	Co-Chairman	Florida Department of Education, Farmworker Program

Members:

Name	Organization
Brian Bauer	CareerSource Research Coast
Kirk Brown	HANDY (Helping Advance and Nurture the Development of Youth)
Joseph D’Souza	The Able Trust
Stefany Deckard	Florida Department of Education, Vocational Rehabilitation
Jeff DeMario	Displaced Youth
Donna Doubleday	CareerSource Heartland
Kristin Dozier	Leon County Commissioner
Kirk Hall	VR Administrator/STW Transition Program
Jim Haugli	Florida Department of Education, Farmworker Program
Susanne Homant	The Able Trust
Teri Jones	Macedonia Education and Career Academy
John Malley	CareerSource Pasco Hernando
Ann Martin	CareerSource Heartland
Jim McShane	CareerSource Capitol Region
John Meeks	Hillsborough Community College
Will Miles	CareerSource Okaloosa Walton
Tom Mudano	AmSkills
Meghan Murray	Agency for Persons with Disabilities
Ryan Naugle	Citrus County School Board -Withlacoochee Tech College
Julie Orange	Department of Juvenile Justice
Lindsay Reilly	Agency for Persons with Disabilities
Regina Rice	Vocational Rehabilitation
Alejita Rodriguez	Vita Nova, Inc.
Suzanne Sewell	Florida Association of Rehabilitation Facilities

Facilitator:

Susan Muha, Maher & Maher

Meeting Dates:

- November 14, 2017
- December 6, 2017
- January 16, 2017
- February 14, 2018
- April 17, 2018

Apprenticeship FLA Workgroup Recommendations



Governance & Policy

June 2018



Submitted by:



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Meeting Dates:

October 17, 2017
November 13, 2017
December 11, 2017
January 8, 2018
February 12, 2018
March 12, 2018
April 16, 2018

Summary:

The Governance and Policy Workgroup met monthly between October 2017 and April 2018 to develop recommendations to expand apprenticeship in Florida. The workgroup members began their efforts by identifying the key barriers and opportunities to growing and diversifying apprenticeship in the state. Once a list of issues to target was agreed upon, the workgroup members established teams to address each issue. Between workgroup meetings, the teams discussed the issues, conducted research, looked at examples from other states, and talked to experts to better understand the barriers and opportunities for expanding apprenticeship. The teams then drafted recommendations that were shared and discussed with all members at the workgroup meetings.

Resources:

Each team drafted a brief paper on one of the nine issues that the Governance and Policy Workgroup chose to focus on to develop recommendations:

- Apprenticeship Value
- Tax Credits
- State and Technical Colleges and Funding for Apprenticeship
- State Funding for Apprenticeship
- WIOA Funding to Support Apprenticeship
- Apprenticeship Occupations
- Apprenticeship Standards and Models
- Youth Apprenticeship and Employer Liability Concerns
- Pre-apprenticeship Programs

These papers, containing an opportunity statement, recommendations and action steps, are included in the appendix and provide additional context and explanation for the recommendations.

Recommendation #1: Apprenticeship Value

Detail:

Apprenticeship programs require apprentices to achieve a level of expertise that is comparable to a college degree. However, unlike countries such as Switzerland and Germany, the United States does not recognize the completion of an apprenticeship as having the same value as a college degree. Elevating apprenticeship graduates to the same level of prestige as college graduates would make a significant difference in the interest in and expansion of the use of apprenticeship programs. Changing the way society values apprenticeship would ultimately yield many benefits: opening career pathways for young people outside the traditional educational model, engaging businesses who are currently struggling to find the skilled personnel they need to grow and expand, and giving Florida a competitive advantage in recruiting new businesses because of the strong workforce that would be developed.

Recommended Action:

- Establish a formal framework of levels of apprenticeship that mirrors college degrees, and make it the policy of the state to recognize those as equivalent to college degrees.
- Integrate this framework and the value placed on apprenticeship into all levels of government and the educational system, using all resources possible, so apprenticeship becomes recognized universally as equivalent in value to college.
- Promote the recognition of apprenticeship, and the thousands of careers available through apprenticeship programs, until society recognizes apprenticeships as equal to college degrees. This may be accomplished through a media campaign.

Recommendation #2: Tax Credits

Detail:

Florida does not currently have a tax credit for employers who hire apprentices. Several states have tax credits that provide incentives for businesses to start or expand apprenticeship programs. The form of these tax credits varies, but they often provide a certain amount per apprentice, or a percentage of apprentice wages, or focus on a specific industry sector or hiring of a specific population (such as youth or veterans). A tax credit for apprenticeship must be explored as the need for workers with technical skills will continue to increase, coupled with the widening of the skills gap. Without such a tax credit, Florida is missing an important way to support apprenticeship expansion and a means to remain competitive, globally and with other states.

Recommended Action:

- Create a new tax credit in Florida, the Skills Matter program, to promote apprenticeship and work-based learning. Based on a hybrid of the results-focused approaches utilized in other states, this program would provide the following tax credits to ensure a win-win for employers and Floridians seeking a career:
 - \$1,000 tax credit for every apprentice hired.
 - \$1,500 tax credit for every veteran apprentice hired.
 - \$2,000 tax credit, or 10% of wages, for every youth apprentice hired.
- Recognizing that the incumbent workforce is vital to the success of employers in Florida, incorporate tax credits into the Skills Matter program that incentivize employers to invest in their businesses and their workforce.
 - Allow employers to claim a tax credit for providing eligible worker retraining to qualified employees participating in an apprenticeship program registered with the Florida Department of Education. Applied annually throughout the course of the training, this credit would cover 40% of all training costs through a community college, or up to \$100 annual credit for each employee if incurred at a private school.
 - Exempt employers from taxation on all qualified real and personal property of a Registered Apprenticeship program.
- Submit an annual report to the legislature regarding the effectiveness of the Skills Matter program to ensure an ongoing focus on measuring effectiveness of the tax credits.

Recommendation #3: State and Technical Colleges and Funding for Apprenticeship**Detail:**

Florida statute 446.051 encourages state colleges and technical colleges/centers to support apprenticeship programs. However, Florida statute 1009.25 indicates that students enrolled in apprenticeship programs are exempt from paying tuition and fees, which has created a disincentive for most colleges to provide the related classroom instruction for apprenticeship programs. Also, most colleges have interpreted this tuition and fee exemption to mean that businesses also can not directly pay colleges for instruction provided to their apprentices. Therefore, colleges must fund apprenticeship training through third party arrangements, such as foundations or private funding, or use the Florida College System Program Fund and Workforce Development training funds. These state resources, appropriated annually by the state legislature, can be used for apprenticeship, but few colleges are currently doing so. These funds are provided to colleges through a complex reimbursement formula based on Full-Time Equivalent (FTEs). Institutions that are involved in apprenticeship training, such as Pinellas Technical College and Santa Fe College, have utilized these state sources for apprenticeship, generated a substantial amount of FTE per student, and found multiple benefits for their students and area businesses.

Recommended Action:

- Modify or delete Florida statute 1009.25(1)(b) to remove the exemption for tuition and fees for students enrolled in apprenticeship programs.
- Add clarification in statute or supplemental guidance to explain how state colleges and technical colleges/centers can use the Florida College System Program Fund and Workforce Development Training funds for apprenticeship, and that they should use these resources to encourage more apprenticeship opportunities.
- Document successes of how colleges in Florida are currently involved in apprenticeship training and disseminate as best practices.

Recommendation #4: State Funding for Apprenticeship**Detail:**

A few years ago, legislation proposed to create the Florida Apprenticeship Grant (FLAG) program that would provide funding for start-up of new apprenticeships, particularly in new sectors such as healthcare, information technology and manufacturing. While the legislation did not pass, there was support for it at the time. Other existing state programs focused on job growth and workforce development may also be a source of support for apprenticeship, such as the Florida Job Growth Grant Fund. Some states provide funding for apprenticeship, and a state-funded program in Florida would provide a key source of revenue to grow apprenticeship, as well as pre-apprenticeship, in the state. Further, state funding for apprenticeship programs should be available to all organizations that can provide high-quality, business-driven apprenticeship training. Some of the state funding that can currently be used for apprenticeship is only available to educational institutions. While colleges are an essential part of the education system in Florida and can be providers of related classroom instruction for apprenticeships, more apprenticeship programs are emerging in which a qualified industry intermediary or workforce training program provides the related instruction. Significantly growing apprenticeship in Florida will require enough capacity in the state to provide related education for apprenticeship programs for employers of all sizes.

Recommended Action:

- Establish a “multi-year” grant opportunity to support start-up costs for apprenticeship programs, such as equipment, staffing, marketing and recruitment, and allow funding for additional years in order to maintain operations for 3 to 5 years.
- Ensure all apprenticeship programs registered with the state, those that use educational institutions and those that use another type of organization to provide high-quality, business-driven related classroom instruction, are eligible for current and future state funding of apprenticeship.

Recommendation #5: WIOA Funding to Support Apprenticeship

Detail:

The Workforce Innovation and Opportunity Act (WIOA) includes an emphasis on pre-apprenticeship and apprenticeship for youth and adult participants. However, local workforce development boards make determinations on how to use their WIOA funding. Only 5 of the 24 local boards in Florida are actively using apprenticeship to increase employment outcomes for workers and businesses. Factors contributing to this may include a lack of understanding about the apprenticeship model, as well as some operational complexities about how to effectively integrate apprenticeship into service delivery. Also, state WIOA funds for incumbent worker training are limited to for-profit companies. Given the goal to expand apprenticeship into new industries, and that incumbent workers are often the starting point for organizations to begin apprenticeships, this guideline prevents the many non-profit and government entities operating in the healthcare sector from accessing Incumbent Worker Training (IWT) resources.

Recommended Action:

- Modify State of Florida guidelines for the WIOA Incumbent Worker Training program to allow funds to go to non-profit and local government entities.
- Develop resource documents to resolve the confusion and lack of understanding regarding apprenticeships and WIOA funds directed to local workforce development boards and business leaders. For example, Florida policy guidance on the use of WIOA funds for apprenticeship that addresses issues raised by local boards and information sheets for employers on apprenticeship.
- Review and revise state and local policy to facilitate the establishment and funding of apprenticeships. For barriers identified by local boards, assess the issues raised and determine the best ways to resolve them. For issues that arise from federal guidelines, pursue understanding of the purpose and/or seek modification to accommodate fund use.

Recommendation #6: Apprenticeship Occupations

Detail:

Florida Statute 446.092 outlines the criteria for apprenticeship occupations in the state. The statute prevents apprenticeships in the following categories: 1) selling, retailing or similar occupations in the distributive field; 2) managerial occupations; and 3) professional and scientific vocations for which entrance requirements customarily require an academic degree. By placing these restrictions on apprenticeship occupations, this state law hinders the growth of apprenticeships, particularly into new industry sectors. For example, this statute would prevent healthcare apprenticeships for registered nurses, physical therapists, nutritionists or other occupations for which an academic degree is required to be in the position. Further, the

role of employers in identifying the need for apprenticeships, developing the programs, providing the practical experience and funding the programs needs to be emphasized.

Recommended Action:

- Enact a legislative change to Florida Statute 446.092 that strikes the language that prohibits apprenticeships in certain occupations.
- Replace this prohibitive language with a provision that focuses on maximizing apprenticeship occupations that support the identified talent needs of business and industry. This provision would add the following as a characteristic of apprenticeship occupations: *“It is recognized as a need by relevant employers who have agreed to participate in the program and who can provide employment opportunities upon successful completion.”*

Recommendation #7: Apprenticeship Standards and Models

Detail:

Apprenticeship standards and registration processes are outdated and cumbersome, making it difficult to start new programs or allow apprenticeship needs to evolve to meet today’s workforce needs. The traditional time-based apprenticeship model, in which apprentices complete a certain number of hours of training, does not always ensure competency in an occupation, and can be discouraging to potential apprentices and businesses given the length of time needed for completion. However, the competency-based model, in which apprentices are assessed for attainment of certain skills and competencies, provide clear career pathways for apprentices, allow businesses to know the true levels of skills achieved and increase the speed that skill levels can be acquired. As a business-driven training approach, companies ultimately select the type of apprenticeship that fits their needs. However, it is not well known that competency-based and hybrid apprenticeships can be created in Florida, and the process to do so has been slow and cumbersome in the past.

Recommended Action:

- Promote competency-based apprenticeships, and make it Florida policy for the preferred model of apprenticeship to be competency-based programs, followed by hybrid programs.
- Develop and distribute information that explains competency-based, hybrid and time-based apprenticeship models, the value and benefits of each, and the process for initiating new or modifying existing programs.
- Streamline the process to create competency-based and hybrid apprenticeship programs, including the creation of an outline or template with clear instructions on how to put a program together quickly and efficiently.

Recommendation #8: Youth Apprenticeship and Employer Liability Concerns

Detail:

Apprenticeship and pre-apprenticeship programs are a valuable strategy for exposing youth to careers and giving them hands-on experience at the job site. However, many manufacturing companies will not recruit individuals under the age of 18 for a factory job. The reasons for this include: 1) limitations under federal law and regulations that prohibit minors from working with moving equipment or machinery; 2) misperceptions among manufacturers about these limitations that lead them to think employing youth is not feasible; and 3) some insurance companies that will not cover the liability of employing a minor under a workers' compensation policy. As a result, some manufacturers have a standing rule that employees must be at least 18 years of age, which limits the pipeline of young workers into manufacturing in Florida and the growth of apprenticeship in this sector.

Recommended Action:

- Increase awareness and understanding about the possibility of youth age 16 and 17-years old working in manufacturing environments under the parameters of current federal law and regulations, highlighting that some manufacturers in Florida are working with youth today.
- Fully understand the current law and regulations for the employment of minors (including the Federal Labor Standards Act and Federal Child Labor Regulations). With this understanding, explore the possibility of removing restrictions related to minors working with machinery and moving equipment, provided that they are in a Registered Apprenticeship or Registered Pre-Apprenticeship program, are under supervision and have been appropriately trained.
- Better understand the position of insurance companies regarding the employment of minors, and explore possibilities for increasing the willingness of insurers to provide coverage or alternatives to covering employers' liability if employing youth as part of an apprenticeship or pre-apprenticeship program.

Recommendation #9: Pre-Apprenticeship Programs

Detail:

While emphasis is typically focused on apprenticeship programs, pre-apprenticeship programs are key to providing foundational skills to individuals before starting an apprenticeship. Pre-apprenticeships allow youth and adults to gain valuable hands-on skills and determine what is the best career path for them. Pre-apprenticeships are also a valuable recruitment tool for businesses, allowing them to vet possible candidates and create a pipeline of workers into their apprenticeships. More high schools could work in partnership with businesses, post-secondary schools and others to start pre-apprenticeship programs to not only teach foundational skills, but also enable youth to explore career and apprenticeship opportunities. Many apprenticeship

programs allow some hours in the pre-apprenticeship to count towards completion of an apprenticeship, which accelerates an apprentice's skills development and advancement opportunities. Strategies for better promoting and supporting pre-apprenticeship programs are an essential part of efforts to expand apprenticeship in Florida.

Recommended Action:

- Develop a marketing campaign that can be adopted by cities, counties and state agencies to inform the public of the benefits of apprenticeships and how to get involved in a pre-apprenticeship program to develop foundational skills and explore career opportunities.
- Provide more state funding to recruit participants and operate youth and adult pre-apprenticeship programs, including funds for multiple years when starting up new programs.
- Encourage efforts and support partnerships to develop high school pre-apprenticeship programs that provide new career and educational pathways for Florida's youth, and adult pre-apprenticeship programs to help young adults and veterans identify a career that best fits their abilities.
- Allow 100% of time in a registered pre-apprenticeship program to be counted toward the completion of an apprenticeship program, in accordance with federal and state guidelines.

Appendix: Resource Papers

Issue #1: Apprenticeship Value

Team: Roy Sweatman, Tom Mudano, and Trevor Charlton

Opportunity Statement

Most apprenticeships require the learning of knowledge and skills that are easily equivalent to those of college degrees. However, society does not recognize apprenticeships equally with college degrees as other countries such as Switzerland and Germany. Elevating apprenticeship graduates to the same level as college degrees would make a significant difference in the interest in and expansion of the use of apprenticeship programs.

Recommendations

The Apprenticeship Governance and Policy Workgroup recommends that Florida take the lead in establishing a formal structure of levels of apprenticeship that are equivalent to the various levels of college degrees. Once established, Florida should promote the equivalency, using all resources possible, to flow the status recognition through all levels of government, all levels of the education system and, perhaps with a media campaign, through all levels of society.

Taking this action and then following up by establishing strong apprenticeship programs will yield many benefits. It will give career pathways to many young people that the current educational model leaves underserved. It will engage businesses who are currently struggling to find the skilled personnel they need to grow and expand. It will give Florida a competitive advantage in recruiting new businesses because of the strong workforce that would be developed.

Action Steps

- Establish a formal framework of levels of apprenticeship that mirror college degrees and make it the policy of the state to recognize those as equivalent to college degrees.
- Flow this status recognition policy through all levels of government and the educational system (Workforce Development Boards, Florida Department of Education, Florida Department of Economic Opportunity, School Systems, Technical Schools, Cities, Counties and other State Agencies), using all resources possible, so apprenticeships become recognized universally as equivalent to college.
- Promote this status recognition and the thousands of careers available, perhaps with a media campaign through the Florida Department of Economic Opportunity, until society recognizes apprenticeships as equal to college.

Issue #2: Tax Credits

Team: Kimberly Moore and Trevor Charlton

Opportunity Statement

Florida does not currently have a tax credit for employers that hire apprentices. Several states have tax credits that provide incentives for businesses to start or expand apprenticeship programs. The form of these tax credits varies, but often provide a certain amount per apprentice (ranging from \$1,000 to \$4,800) or a certain percentage of apprentice wages (ranging from 10% to 50%). Some state tax credits also focus on a specific industry sector or hiring of a specific population (such as youth or veterans). A tax credit for work-based learning programs more broadly, of which apprenticeship is one proven model, must be explored as the need for workers with technical skills will only continue to increase coupled with the widening of the skills gap. Moreover, it is estimated to cost \$150,000 for individuals to complete a 4-year apprenticeship program. Without a tax credit for apprenticeship, or possibly for work-based learning more broadly, Florida is missing out on an important way to support apprenticeship expansion and a means to remain competitive with other states and globally.

Recommendations

94% of Florida manufacturers are companies with less than 50 employees. These companies are important to Florida, and we need these manufacturers, as well as the large companies, to take on and train apprentices. The cost of training an apprentice is one of the primary reasons small manufacturers are reluctant to enter into apprentice training.

As a result, it is imperative that a program be formalized to address this issue. We propose creation of Florida's *Skills Matter* apprenticeship program that will include a hybrid of the results-focused approach seen in other states and will ensure that employers and Floridians seeking a career all win. The *Skills Matter* apprenticeship program will provide Florida businesses with a \$1,000 tax credit for every apprentice hired. In the case of veterans hired, the business will be provided a \$1,500 tax credit. The *Skills Matter* apprenticeship program will apply the many transferable skills gained through the veteran's prior military service to an apprenticeship opportunity. In addition to veterans, Florida's *Skills Matter* apprenticeship program will target youth, whose unemployment rate ranks highest among any other age group. Employers who hire a youth apprentice will be given a credit in the amount of \$2,000 or 10% of wages earned by the youth apprentice, whichever is less.

The incumbent workforce is also vital to the success of employers operating in Florida. Therefore, Florida employers will be incentivized to invest in their businesses by developing their existing workforce. The incentive will target incumbent worker retraining and equipment purchases.

With respect to the incumbent workforce, employers will be able to claim a tax credit for providing eligible worker retraining to qualified employees including apprenticeships that are

registered with the Florida Department of Education. The credit will cover 40% of all training costs through a community college, or up to \$100 annual credit for each employee if incurred at a private school. The tax credits and employer support would be applied annually and throughout the course of the training.

As it pertains to initial equipment purchases and future upgrades, it is understood that having the right equipment is necessary in order for businesses to remain competitive. As a result, employers will be exempt from taxation on all qualified real and personal property of an apprenticeship program.

Regarding accountability, in an effort to ensure that there is an ongoing focus on measuring effectiveness, CareerSource Florida will provide an annual report to the legislature regarding the effectiveness of the program.

Action Steps

- CareerSource Florida will work in partnership with the legislature to craft legislation to support the implementation of the proposed tax incentive model.

Issue #3: State and Technical Colleges and Funding for Apprenticeship

Team: Bob Crawford, James Oriani, John McNeely, and Michelle Schultz

Opportunity Statement

Florida Statute 446.051 encourages state colleges and technical colleges/centers to support apprenticeship programs. However, Florida Statute 1009.25 indicates that students enrolled in apprenticeship programs are exempt from paying tuition and fees, which has created a disincentive for some colleges to provide the related classroom instruction. Related classroom instruction funding for apprenticeship programs is dependent on the Florida College System Program Fund and Workforce Development Training funds, which are appropriated by the state legislature annually. Colleges can generate FTE for students while enrolled in classroom instruction. Budgets for apprenticeship programs vary based on the institution and its priorities. Not only can apprentices not be charged tuition/fees, but most colleges interpret the tuition fee exemption to mean that businesses also can not directly pay colleges for instruction provided to their apprentices.

Colleges must fund apprenticeship training through other sources, such as the FTE process, foundations, or private funding. State colleges as well as technical colleges/centers can use the College System Program Fund or Workforce Development training funding from the Florida Department of Education for apprenticeship programs, but few state colleges currently use these funds for apprenticeship. Institutions that are involved in apprenticeship training, such as

Pinellas Technical College and Santa Fe College, have generated a substantial amount of FTE per student from both funding sources and found multiple benefits for their students and area businesses.

Recommendations

- State colleges might focus initially on Post-Secondary Adult Vocational (PSAV) (clock-hour) programs, as these seem to be better aligned the current FTE funding mechanism.
- Perhaps the Florida Department of Education can explore way of making FTE funding more compatible with all college programs (Associate of Science/College Credit Certificate), not just PSAV (clock-hour) programs, which might increase overall support for Registered Apprenticeship programs.
- Add further definition to the statute or supplemental guidance to clarify and make transparent how apprenticeship funds are generated and should be used by the state colleges and technical colleges/centers to encourage more apprenticeship opportunities.

Action Steps

- Florida statute 1009.25(1)(b) needs to be modified/deleted to remove the fee exemption.
- A centralized repository of successes be maintained from the Florida Department of Education to disseminate best practices in Registered Apprenticeship.

Issue #4: State Funding for Apprenticeship

Team: Tom Mudano and Beth Tracy

Opportunity Statement

A few years ago, legislation was proposed to create the Florida Apprenticeship Grant (FLAG) program that would provide funding for start-up of new apprenticeships, particularly in new sectors such as healthcare, information technology, and manufacturing. Unfortunately, the legislation did not pass, but there was support for it at the time. Other existing state programs focused on job growth and workforce development may also be a source of support for apprenticeship, such as the Florida Job Growth Grant Fund. Some states provide state funding for apprenticeship, and a state-funded program in Florida would provide a key source of revenue to grow apprenticeship programs, as well as pre-apprenticeship programs, in the state.

Only educational institutions can receive funding through two state programs – the Florida College System Program Fund and Workforce Development training funds – that support

apprenticeship and other work development activities. While colleges are an essential part of the education system in Florida and can be providers of related classroom instruction for apprenticeships, they are not the only entities that can play this role for apprenticeship programs. More apprenticeship programs are emerging in which a qualified industry intermediary or workforce training program, such as the American Manufacturing Skills Initiative (AmSkills), provides the related education for employers for their apprenticeship programs. To leverage the collective capacity that exists within the state to grow apprenticeship and meet the skills needs of business, it is important that entities other than educational institutions have access to state-funded programs for apprenticeship, as long as these apprenticeship programs are registered with the state. Absent such resources, the costs for apprenticeship training are charged to the program participants, the company, or both, which prevents many companies from participating because they are unable to bear the full cost of the operating the program.

Recommendations

- Increase “multi-year” grant funding opportunities to support start-up costs for apprenticeship programs, such as equipment, staffing, marketing, and recruitment, and include additional years to maintain operations for at least 3 to 5 years.
- Ensure apprenticeship programs that use another type of organization, other than an educational institution in the state, to provide high-quality, business-driven related classroom instruction, are eligible for state funding of apprenticeship.

Action Steps

- Increase funding for start-up of apprenticeship programs for up to 3-5 years.
- Conduct a review of requirements for any current state funding for apprenticeship, and any state-funded programs for apprenticeship developed in the future, to ensure that programs that use educational institutions or other organizations for apprenticeship training are eligible.

Issue #5: WIOA Funding to Support Apprenticeship

Team: Mary Lou Brunell and Michelle Zech

Opportunity Statement

The Workforce Innovation and Opportunity Act (WIOA), which provides funding to state and local areas for workforce development programs, includes an emphasis on pre-apprenticeship and apprenticeship for youth and adult participants. However, local workforce development boards make determinations on how to use their WIOA funding. While some local boards, such

as CareerSource South Florida and Research Coast, are actively using apprenticeship to increase employment outcomes for workers and businesses, only 5 of 24 local boards in Florida are involved in apprenticeship. Barriers identified include the required length of apprenticeships, low rates of pay at the beginning of the apprenticeship, and state policy that excludes employers which would benefit greatly from an apprenticeship program. Also, local boards are more inclined to use WIOA funds to pay for supportive services for apprentices as opposed to supporting the training costs of apprenticeship. Factors contributing to this may be a lack of understanding about the apprenticeship model and how WIOA funds can be used for apprenticeship, as well as confusion on the availability of state college workforce funds to pay for tuition associated with apprenticeships.

Recommendations

- Modify State of Florida guidelines for the Incumbent Worker Training (IWT) program to allow funding of non-profit and local government entities.

As stated in the CareerSource Florida *Incumbent Worker Training Program Guidelines: July 01, 2017 – June 30, 2018*, one of the criteria for companies applying for IWT grant funding is that they “be a for-profit company in the State of Florida.” The guidelines further state that the following businesses are not eligible to apply for funds – “not-for-profit agencies or organizations.” However, the U.S. Department of Labor published guidance letter states that “generally, IWT should be provided to private sector employers; however, there may be instances where nonprofit and local government entities may be the recipients of IWT funds. For example, IWT may be used in the health care industry where hospitals are operated by non-profit or local government entities and a nursing upskilling opportunity is available.”

- Develop resource documents to resolve the confusion and lack of understanding regarding apprenticeships and WIOA fund use directed to local workforce development boards and business and industry leaders, such as:
 - Documents that define terms (e.g. supportive services; Registered Apprenticeships) and inter-changeability of concepts (e.g. residency vs. apprenticeship vs. on-the-job training) to promote common understanding.
 - Florida policy guidance on the use of state and local WIOA funds for apprenticeships which addresses issues raised by local workforce boards (similar to the U.S. Department of Labor guidance on WIOA and apprenticeship, adjusted for the State of Florida).
 - Information sheets to guide employers on the applicability of apprenticeships in business settings and how to access WIOA funds for apprenticeship.
- Review and revise state and local policy to facilitate the establishment and funding of apprenticeships. With reference to the barriers identified by the local workforce development boards, consider the legitimacy of issues raised and ways to resolve them (e.g. paperwork and requirements). For those issues that arise from federal guidelines, pursue understanding of the purpose and/or seek modification to accommodate fund use.

Action Steps

- CareerSource Florida makes necessary modifications to State of Florida guidelines for the IWT program to allow funding of non-profit and local government entities.
- With input from the local workforce development boards and business and industry leadership as appropriate, CareerSource Florida leads the development of resource documents to accomplish the following:
 - Definition of terms and understanding the inter-changeability of concepts.
 - Florida policy guidance on the ways that state and local WIOA funds can be used for apprenticeships and to address policy issues raised by local boards.
 - Guidance to employers on the applicability of apprenticeships in business settings and the use of WIOA funds.
- CareerSource Florida reviews and revises state and local policies to facilitate the establishment and funding of apprenticeships.

Issue #6: Apprenticeship Occupations

Team: Mary Lou Brunell

Opportunity Statement

Florida Statute 446.092 outlines the criteria for apprenticeship occupations in the state. In addition to detailing the characteristics required of all apprenticeship occupations, the statute prevents apprenticeships in the following categories: 1) selling, retailing, or similar occupations in the distributive field; 2) managerial occupations; and 3) professional and scientific vocations for which entrance requirements customarily require an academic degree. By placing these restrictions on apprenticeship occupations, this state law hinders the growth of apprenticeship, particularly into new industry sectors. For example, this statute would prevent healthcare apprenticeships for registered nurses, physical therapists, nutritionists, or other occupations for which an academic degree is required to be in the position. Further, the role of employers in identifying the need for apprenticeships, developing the programs, providing the practical experience, and funding the programs needs to be emphasized.

Recommendations

- Recommend that Florida Statute 446.092, Item 6 be struck and the following inserted as a new Item 6:

6. It is recognized as a need by relevant employers who have agreed to participate in the program and who can provide employment opportunities upon successful completion.

- The current Item 6 reads in the negative and is exclusionary:

Florida Statute 446.092, Item 6. "It does not fall into any of the following categories:

- a) Selling, retailing, or similar occupations in the distributive field.
- b) Managerial occupations.
- c) Professional and scientific vocations for which entrance requirements customarily require an academic degree."

The new language will maximize available apprenticeship occupations that support the identified talent needs of business and industry while remaining consistent with federal guidelines. As an example, the rapid changes in the healthcare industry demand continuous learning of new treatments, techniques, equipment, and procedures for staff regardless of their academic preparation. By recognizing that industry drives the identification and development of apprenticeships, we can assure the use of federal and state resources to meet industry needs and increase the likelihood of new or continued employment as intended to improve Florida's workforce.

Action Steps

- CareerSource Florida works with elected leadership to propose statutory language change during the 2019 Legislative Session.

Issue #7: Apprenticeship Standards and Models

Team: Roy Sweatman, Tom Mudano, and Trevor Charlton

Opportunity Statement

Federal Department of Labor apprenticeship standards are outdated and cumbersome, making it difficult to start new programs and apprenticeships need to evolve to meet current needs. (For example, most apprentices are required to be supervised by a "journeyman," which does not apply or is not needed in many occupations.) The time-based apprenticeship model is discouraging to potential apprentices as well as to business and just spending a certain amount of time at an occupation does not ensure competency. It is not well known that the ability to create hybrid and competency-based apprenticeship programs exists in Florida and the process to do so has been very slow and cumbersome. Clear competency standards for apprenticeship

programs that are measurable will allow for various levels of achievement equivalent to college degrees.

Recommendations

The Governance and Policy Workgroup recommends promoting competency-based apprenticeships as the preferred model. Competency-based apprenticeship could be structured using industry-recognized stackable credentials allowing multiple levels of apprenticeships equivalent to college Associate, Bachelor, Master's degrees, etc. Flexibility could be built in to allow programs to be tailored to businesses' needs. Benefits of this include apprentices having clear career pathways, businesses knowing the true levels of skills achieved, and increasing the speed skill levels can be acquired.

We recommend publication and promotion of information that clarifies competency-based, hybrid, and time-based apprenticeship models including the values/benefits of each model and the process for initiating new or modifying existing programs.

We also recommend that the process to create competency-based and hybrid apprenticeships be streamlined, perhaps with an outline or template to follow with clear instructions on how to put a program together quickly and efficiently.

Action Steps

- Make it State of Florida policy for the preferred model of apprenticeships to be competency-based followed by hybrid models, rather than time-based, utilizing industry-recognized, portable, stackable credentials that provide career pathways with levels of achievement similar to levels of college degrees.
- Publish and promote information that clarifies competency-based, hybrid and time-based apprenticeships, the values/benefits of each model, and the process for initiating new or modifying existing programs.
- Streamline the process to create or modify competency-based or hybrid apprenticeships with an outline or template to do so with clear "how to" instructions.

Issue #8: Youth Apprenticeship and Employer Liability Concerns

Team: Trevor Charlton and Tom Mudano

Opportunity Statement

Many manufacturing companies will not recruit individuals into a factory job until they are 18, and this includes apprenticeships and pre-apprenticeships. The reason for this is generally as a result of the legislation relating to the employment of minors (under 18) in a factory

environment (the Federal Labor Standards Act and Federal Child Labor Regulations). It is not that employing minors is prohibited, but there are restrictions which prohibits a minor from working with moving equipment or machinery. As a result, many companies have made a rule that employees must be 18 to work for them and some insurers will not cover the liability of employing minors under a workers' compensation policy, even if their duties are restricted according to the requirements of the legislation.

However, many companies have employed minors of the age 16 and 17 (you must be at least 16 to work in a factory) and ensured that they do not work with moving equipment or machinery. Here is an example of tasks that those under 18 may perform in a factory environment:

- Assembly using hand tools.
- Kitting materials or tools for production.
- Inspecting components of fabricated parts or finished products.
- Testing sub-assemblies with manual equipment or low voltage test equipment less than 24 Volts.
- Warehouse or stockroom work not involving moving equipment.
- Receiving or shipping work not involving moving equipment.
- Shadowing employees operating equipment but not directly involved.
- Working in an office supporting manufacturing (Design, Scheduling, Purchasing, Material Control, Estimating, Cost Estimating, Quality, Manufacturing Engineering, Safety, HR, Cost Accounting etc.).
- Maintenance tasks not involving machinery, driving vehicles, scaffolding, ladders, roofs, trenches or activity above 6'.
- Computer Numerical Control (CNC) machinery which is fully enclosed, guarded, and protected by safety interlocks, where the equipment will automatically switch off if the guard is opened.

Recommendations

As we strive to increase the number of youth in apprenticeships and pre-apprenticeships, it is important that current legislation relating to the employment of 16 and 17-year old's is fully understood. However, a change in the legislation could be very helpful to attaining greater participation. Currently, it is possible for minors to work in manufacturing companies and under certain circumstances to work with moving machinery and equipment, but the regulations are not well understood. We want to see the lifting of the current restrictions related to working with machinery and moving equipment, provided youth are employed in a Registered Apprenticeship or participating in a registered pre-apprenticeship. We would also want the young person to be under the supervision of a fully trained operator and have been appropriately trained and evaluated as competent.

In addition, there would also need to be a change in the insurance position relating to workers' compensation. Insurers must offer insurance to all employees 16 and over and cover youth providing they meet the requirements detailed above.

Action Steps

- Better communicate the current legislation relating to the employment of minors in all initiatives associated with increasing the number of apprenticeships.
- Seek legal advice on the proposal in relation to the state position in regard to federal legislation.
- Better understand the insurance position with workers' compensation and what would be required to implement the change proposed.
- Following steps 1 & 2 evaluate the opportunity for changing legislation.

Issue #9: Pre-Apprenticeship Programs

Team: Tom Mudano and Linda Woodard

Opportunity Statement

While most of the emphasis is typically focused on apprenticeship programs, pre-apprenticeship programs are really the key to providing foundational skills to individuals before starting an apprenticeship. Youth and adult pre-apprenticeship programs allow students to explore various career tracks within a specific industry (e.g. manufacturing, IT, public works, healthcare, etc.), gain valuable hands-on foundational skills, and help them to determine what is the best career path for them. Learning in a pre-apprenticeship is best achieved through a combination of hands-on projects, theoretical application, and field trips to businesses so the participants can see the potential work environments they may be working in. Most apprenticeship models allow hours in the pre-apprenticeship program to count towards the completion of an apprenticeship.

More high schools could start pre-apprenticeship programs, not only to teach foundational skills but also to enable youth to explore career and apprenticeship opportunities. Through partnerships formed by high schools, businesses, post-secondary institutions, and other community organizations, local areas and states across the country are looking to pre-apprenticeship type programs to better prepare students for success after graduation. These programs come in different forms and are called different names, but examples include: Wisconsin's state-wide Youth Apprenticeship Program that provides high school students experience in 11 career clusters; the Charleston Regional Youth Apprenticeship program that dual-enrolls high school students in community college and provides part-time jobs with employers in manufacturing and other sectors; and Pathways into Technology Early College High School (P-TECH) that is an IBM-supported program spanning grades 9-14 that blends high school, community college, and business-industry workplace skills. Such programs can also help to close the "achievement gap" among underserved and economically disadvantaged youth by giving them alternative education and career pathways.

Pre-apprenticeship is not only valuable for high school students but can provide an important bridge to apprenticeship for adult workers, preparing them to re-enter the workforce or start a new career. Many young adults struggle trying to determine the best career path for them and often change jobs many times because they have no guidance or support on how to determine the best career path for them. Adult pre-apprenticeship programs can allow these young adults to explore various career tracks, learn basic foundational skills, and, through guidance, determine the best fit for them as they enter their apprenticeship.

Adult pre-apprenticeship programs like the American Manufacturing Skills Initiative (AmSkills), otherwise known as AmSkills in Tampa Bay Florida, not only provide adults and veterans with foundational skills in a hands-on real-work environment, but also teams them up with coaches and mentors after they start their career in the manufacturing industry. This ensures greater opportunity for longer-term success. Strategies for how to fund pre-apprenticeship programs also must be explored.

Recommendations

- Develop a marketing campaign that can be adopted by city, county, and state agencies to inform the public of the benefits of becoming an apprentice and how they can get involved in a pre-apprenticeship program to help them explore their career opportunities. Marketing campaigns should include as much attention for pre-apprenticeship programs because these programs are the feeder system into apprenticeship programs and allow for a significant amount of vetting to take place prior to the student becoming an apprentice, leading to longer-term success for the apprentice and the company.
- Provide more funding to pre-apprenticeship and apprenticeship programs for multiple years when starting up new programs.
- Allow 100% of time in a registered pre-apprenticeship program to be counted toward the completion of an apprenticeship program, in accordance with federal and state guidelines.
- Encourage efforts and support partnerships to develop high-school pre-apprenticeship programs that provide new career and educational pathways for Florida's youth; and adult pre-apprenticeship programs to help young adults and veterans identify a career that best fits their abilities.

Action Steps

- Increase marketing for pre-apprenticeship programs as a model to recruit young adults, provide foundational skills, and allow them to explore various career paths within a specific industry.
- Provide more funding to recruit participants and operate youth and adult pre-apprenticeship programs.

- Explore policy or other changes needed to allow 100% of time in a pre-apprenticeship program to be counted toward the completion of an apprenticeship program.
- Share program models and promising practices for high school pre-apprenticeship programs, and, through the leadership of the Florida Department of Education and other relevant state agencies, convene high schools and other partners to raise awareness of the value of pre-apprenticeship approaches for student success.
- Identify successful pre-apprenticeship models in the state and determine which programs can be replicated to assist all trades in developing successful pre-apprenticeship and apprenticeship programs.
- Educate trade associations on the benefits of youth and adult pre-apprenticeship models and assist them in implementing.

Workgroup:

Governance and Policy Workgroup

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James Oriani	Eastern Florida State College
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