










# Tampa Bay IT Workforce Analysis: Recommendations and Updates – 2.17.14










Recommendations	Updates
<p>• <b>Real World Training for High Demand Jobs</b> - Employers reported a need to fill positions requiring specific technical skills. Students reported the desire to practice the technical skills they learn and to have access to the most current and BETA versions of new technologies. Small and mid-size employers reported the need for graduates to have more technical skills.</p>	
<p> Create Exploration Labs for students to practice new skills learned in the classroom, boot camps, and online courses. Similar labs exist within specific colleges and focus on technology taught in the classroom. These labs will cross the boundaries of the individual institutions and engage student, faculty, and businesses in classroom learning, business use cases, and community competitions.</p>	<ul style="list-style-type: none"> <li>• Exploration Lab will be available for free access in early 2014. Hosted in the cloud, students will be able to visit the lab to view videos on new technologies and read white papers.</li> </ul>
<p> Develop technical training programs - online and boot camp style - opportunities for current high-demand skills; Java, .NET, Agile development, cloud computing engineers, sales engineers, CRM and SharePoint. Prepare training in future areas of expansion including business analytics, big data, desktop support, computer and software engineers. Boot camp and online training should be supplemented with student focused seminars to reinforce the skills learned. Market to IT Professionals that are seeking re-skilling, updating skills, or seeking employment.</p>	<ul style="list-style-type: none"> <li>• Regional schools reviewed and revised curricula based on the study's findings.             <ul style="list-style-type: none"> <li>○ St. Petersburg College – AS, BAS, and certificate programs impacted</li> <li>○ Hillsborough Community College Institute for Corporate &amp; Continuing Education – new certificate programs created</li> <li>○ Keiser University – new BA in Business Analytics established</li> </ul> </li> <li>• The Tampa Bay Hi-Tech Program is training employed and unemployed workers with IT experience, to help them increase their skills and move up the career ladder. As of September 30, 2013, 968 have started training, of which 263 individuals have completed training.</li> </ul>
<p> IT professionals will coordinate with educators to develop business use cases for high demand technical courses including boot camp style sessions, classroom coursework, and Exploration Labs.</p>	<ul style="list-style-type: none"> <li>• Relationships between business and education have been and continue to be strengthened.</li> <li>• Challenges to the use of business cases have been identified. The benefits of this recommendation will continue to be explored.</li> </ul>

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 Offer quarterly webinars by business experts on new technology to assist faculty to engage with vendors regarding the application of the technology in the workplace.	<ul style="list-style-type: none"> <li>This recommendation has become less of a priority; the need for it will be monitored.</li> </ul>
 Expand recruitment of returning Veterans and provide supplemental technical training. Current efforts are underway in the Tampa Bay area. Increased coordination of career pathways and jobs available should be expanded. Businesses are interested in hiring qualified Veterans.	<ul style="list-style-type: none"> <li>Veteran career and internship fair was held in September 2013.</li> <li>As of September 30, 2013 57 Veterans have enrolled in the Tampa Bay Hi-Tech Program.</li> </ul>
 Participate in Department of Education-recognized apprenticeships programs for high- demand jobs.	<ul style="list-style-type: none"> <li>IT Apprenticeship program is being developed as described under “Innovative Career Development, Recruitment, and Retention Practices”.</li> </ul>
 Expand the use of IT Competency Model, Framework for 21st Century <sup>1</sup> skills and STEM to provide both soft and technical skills for high school and college students to increase readiness to work.	<ul style="list-style-type: none"> <li>This is a long-term recommendation. It is being monitored but has not been put into action.</li> </ul>
<ul style="list-style-type: none"> <li><b><i>Streamline Internships for Tomorrow’s Workforce</i></b> – <i>New hires need to have more real world experiences with technologies, knowledge of enterprise systems, possess the right mix of academic and workplace competencies, and be proficient in multiple areas. Students are requesting more internship opportunities to allow for multiple internships to build a portfolio for graduation. Small to mid-size business are willing offer internships but do not have the structure.</i></li> </ul>	
 Encourage use of a standards-based social marketing tool, such as LinkedIn, to advertise opportunities that would allow companies to post opportunities, faculty to recommend students, and students to find opportunities. Create a team of students, business owners, and educators to define the functionality and process of the online solution.	<ul style="list-style-type: none"> <li>Plan modified – Student chapters of the Tampa Bay Technology Forum (TBTF) are being established at schools. The chapters provide avenues for businesses and students to communicate and connect.</li> </ul>
 Expand internship opportunities at all postsecondary institutions. While internships are offered at local colleges and universities, when students begin to increase participation through marketing efforts, more opportunities will be needed.	<ul style="list-style-type: none"> <li>The Workforce Working Group of the Florida Eight is developing an internship guide for replication at all local educational institutions.</li> <li>TBTF is conducting outreach to businesses to encourage partnerships with educational institutions and providing internships to regional students.</li> </ul>

<sup>1</sup> **Framework for 21<sup>st</sup> Century Learning** – a holistic view of 21<sup>st</sup> century teaching and learning that combines a discrete focus on 21<sup>st</sup> century student outcomes, blending specific skills, content knowledge, expertise, and literacy’s. <http://www.p21.org/about-us/p21-framework>.








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 <p>Provide training to businesses on best practices for setting up internships. Include discussion with students to provide feedback the “best” and “worst” internship experiences including feedback from students on internship process.</p>	<ul style="list-style-type: none"> <li>• Internship training provided to 28 area companies, which were connected directly to the career center staff of eight colleges and universities.</li> </ul>
 <p>Conduct internship fairs to connect students with employers. Motivate students to seek multiple internship opportunities throughout their college experience that will expand their knowledge, technical skills, and awareness of local businesses.</p>	<ul style="list-style-type: none"> <li>• USF held internship fair with 25 businesses and over 125 students.</li> <li>• Student education on the benefits of internships is being done through the work on Tampa Bay Technology Forum (TBTF) student chapters, described in the update for the final recommendation.</li> <li>• A Tech Trek was held in spring of 2013, which took students to local businesses so they can see the IT career opportunities available in the region. Two more are scheduled through April 2014.</li> </ul>
 <p>Increase the capacity of career centers to provide students with career pathways and to be prepared to compete for internships earlier in their education.</p>	<ul style="list-style-type: none"> <li>• The building of the relationships between business and education will support this recommendation.</li> </ul>
 <p>Businesses are requiring employees to have a broader range of leadership and technical skills. Motivate students seeking non-technical degrees to seek a double major/minor in the technology field.</p>	<ul style="list-style-type: none"> <li>• Student outreach is being conducted through student TBTF chapters, which are open to all interested students, regardless of academic major.</li> </ul>
<p>➤ <b><i>Innovative Career Development, Recruitment, and Retention Practices</i></b> – <i>to be competitive in the global market, business productivity requires the continuous acquisition of new skills that expand industry-wide technical competencies. New skills can be obtained through a variety of continuously available training modalities.</i></p>	
 <p>Leverage existing or new channels to recruit IT Talent. Market the numerous communities of interest that will support the skills development of staff. Examples include: SQL, Oracle SharePoint, JAVA, .NET, and other programming and IT skill areas. Market the many job board options to employers; connecting the unemployed with the available opportunities; and, coordinate job placement activities in situations where companies downsize.</p>	<ul style="list-style-type: none"> <li>• The region’s workforce boards work with employers to post job opportunities and recruit skilled workers.</li> <li>• Staff development can be supported by funds through the Employed Worker Training program, managed by the workforce boards.</li> </ul>
 <p>Develop a <i>Talent Satisfaction Index</i> that will quantify job/life/ career satisfaction and job retention. Begin to measure why talent remains loyal to the company.</p>	<ul style="list-style-type: none"> <li>• Development of the Index has not started.</li> </ul>
 <p>Explore practices to encourage and support talent development and career growth (mentoring, lifelong learning, IT leadership training, and apprenticeship programs).</p>	<ul style="list-style-type: none"> <li>• WorkNet Pinellas and Tampa Bay WorkForce Alliance (now known as CareerSource Pinellas and CareerSource</li> </ul>

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	<p>Tampa Bay, respectively) are working with business leaders to create an IT apprenticeship program, the first in the state of Florida.</p> <ul style="list-style-type: none"> <li>• Program focuses on shortages of IT skills in region.</li> <li>• Standards of apprenticeship have been developed and submitted to the FDOE State Apprenticeship office for approval (10/23/13).</li> <li>• Minimum qualifications of apprentices established.</li> <li>• Developed and submitted the Related Technical Instruction to Department of Education for final approval of technical instruction.</li> <li>• Four job titles have been determined to be good fits for apprentice-style training: Applications Software Developer, Web Programmer Analyst, Network Technician, Help Desk Technician.</li> <li>• Educational institutions for classroom training have been selected and program guidelines have been developed.</li> </ul>
 <p>Modify degree programs to accommodate students returning for a technical degree but have already completed non-technical degrees and have job experience.</p>	<ul style="list-style-type: none"> <li>• This long-term recommendation is being monitored but has not been put into action.</li> </ul>
 <p>Explore the range of practices that will support healthy collaboration between businesses to foster an innovative community</p>	<ul style="list-style-type: none"> <li>• This long-term recommendation is being monitored but has not been put into action.</li> </ul>
<p><b><i>Regional Marketing and External Recruiting-</i></b> Companies are seeking talent with 3-5 years of experience and knowledge of enterprise level development logic requiring little supervision. Marketing the variety of IT career pathways will increase the local talent pool. The strengthening of relationships between education and business will increase the success of transition from school to the workforce. Innovation is a catalyst for an expanding the technology community along with engaging students, and attracting/recruiting an experienced talent.</p>	

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 <p>Establish relationships with student organizations such as TBTF Chapters at colleges and universities in Tampa Bay. Set up a virtual TBTF for Tampa Bay students that are attending colleges outside of the area. Engage them in webinars, internships and seasonal activities.</p>	<ul style="list-style-type: none"> <li>• 4 colleges/universities in the Tampa Bay area have established TBTF Student Chapters.</li> <li>• 3 more college/universities are in the planning stages for TBTF Student Chapters.</li> </ul>
 <p>Initiate recruiting trips around high demand skills by conducting marketing campaigns to target cities and by attending convergence events, universities, or virtual events to increase the in- migration of IT talent by marketing Tampa Bay nationally. Efforts will be coordinated with EDC groups to identity market information and resources. The campaign will use social media and technology networks.</p>	<ul style="list-style-type: none"> <li>• The promotion of the study and its recommendations, along with its progress, will help build the region’s reputation as a source of opportunity in the IT industry.</li> </ul>
 <p>Provide training to HR, recruiters, and career placement professionals to increase knowledge of how to market the Tampa Bay area to prospective candidates. Provide talking points and other collateral resources.</p>	<ul style="list-style-type: none"> <li>• The implementation process has led to this recommendation becoming less of a priority. The need for this will be monitored.</li> </ul>
 <p>Conduct technology challenges/competitions for students and professionals to test their problem solving and technical skills such as Hack-a-Thons, code builds, etc., similar to the Capture the Flag sponsored by Mitre in cooperation with the CTEF.</p>	<ul style="list-style-type: none"> <li>• Hillsborough County held its first ever Hackathon in April 2013. Nine teams competed, and the winners received cash prizes.</li> </ul>
 <p>Nurture and grow partnerships between K-12, universities, colleges, and community colleges and all size businesses to expose students to career options by conducting career exploration fairs connecting to programs such as <i>TechPath</i><sup>2</sup>.</p>	<ul style="list-style-type: none"> <li>• As relationships are built, specific actions to improve partnerships will be explored.</li> </ul>
 <p>Managing a “Listening Post” that has continual feedback on the linkages between students, education, and business. Measure the progress on the implementation of the strategies.</p>	<ul style="list-style-type: none"> <li>• WorkNet Pinellas and Tampa Bay WorkForce Alliance (now known as CareerSource Pinellas and CareerSource Tampa Bay, respectively) are working with partners to track and promote implementation progress.</li> </ul>
 <p>Conduct a parent / business event that will bring parents and business and educational leaders together to discuss career options.</p>	<ul style="list-style-type: none"> <li>• TBTF staff are working with Tech Start Tampa Bay and Keiser University to conduct Parent/Business presentation to educate parents on the career paths available for their children.</li> <li>• TBTF staff are assisting in the development of PSA’s for Keiser University on the importance of technology education for the Tampa Bay area.</li> </ul>

<sup>2</sup> **techPath** – Cultivating tomorrow’s workforce. <http://www.floridahightech.com/techpath.php>