Texas Workforce Investment Council

Policy News Highlights

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Policy News Highlights is a quarterly review of selected reports relevant to the policy and research functions of the Texas Workforce Investment Council (Council). Federal and state agency websites, in addition to numerous public policy and educational databases, are scanned monthly for relevant and emerging issues. Reports are catalogued and stored electronically in the Council's Information Repository (IR).

The IR is divided into 12 topic areas that correspond to priority issues supporting the Council's current strategic plan. They are: adult education, apprenticeship, career and college readiness, career and technical education, clusters and sector strategies, competitiveness, data, disabilities, dropout prevention, green initiatives, supply-demand, and training. Not every topic area is addressed each quarter.

Policy News Highlights is organized as an annotated bibliography with short summaries of recent articles grouped according to their topic area.

Adult Education

Learning English in Rural America, Education Commission of the States, November 2014
In the 10-year period between 2000 and 2010, the population of English language learners (ELLs) rose 18 percent nationwide. Some states saw dramatic increases ranging from 255 to 610 percent as industries such as food processing, manufacturing, and some service industries began establishing facilities in rural areas. Immigrants followed these jobs, and many schools and districts experienced significant increases in the demand for English language instruction. This paper highlights the challenges confronting these rural districts; the need for valid, reliable, and consistent information on the demand for language-support services; and strategies, lessons learned, and recommendations from several states.
www.ecs.org/clearinghouse/01/15/59/11559.pdf

Apprenticeship

A Quick Start Toolkit: Building Registered Apprenticeship Programs, U.S. Department of Labor, Employment and Training Administration, November 2014
A long-standing and proven employment and training strategy in the construction industry and skilled trades, apprenticeship has expanded into healthcare, information technology, advanced manufacturing, transportation and logistics, and energy. Today, there are apprenticeships in over 1,000 occupations. This toolkit is designed to encourage business, labor and industry associations, community colleges, and

community-based or service organizations to explore the apprenticeship model as a workforce strategy and provide guidance in launching new programs. It provides helpful steps and resources to facilitate partnerships with key regional stakeholders to build the core components of an apprenticeship program, register the program as part of the national Registered Apprenticeship network, and launch the new program based on lessons learned across a variety of programs and occupations.
www.doleta.gov/oa/employers/apprenticeship_toolkit.pdf

Career and College Readiness

States Have Made Progress in Implementing New Standards and Assessments, but Challenges Remain, Government Accountability Office, December 2014
According to this report, regardless of whether states developed their own college and career readiness standards and assessments or adopted the Common Core, the implementation strategies used and challenges that arose were similar. Ensuring sufficient internet capacity and an adequate number of computing devices to administer computer-based statewide assessments, lack of alignment between instructional materials and new standards, declining assessment scores, and an extensive amount of communication required to prepare parents for the results of the assessment were primary challenges faced by the states. The study found that the methods that states employ to administer assessments and use scores can affect comparability of the outcomes across states.
www.gao.gov/assets/670/667478.pdf

MakeHers Report: Engaging Girls and Women in Technology through Making, Creating, and Inventing, Intel, November 2014
This report provides the first compilation of data on how girls and women participate in the maker movement, a cultural trend that emphasizes learning practical skills and exploring novel applications of technology to create things. The report examines participation in making activities to determine how these activities might provide a bridge for more women and girls to pursue careers in computer science and engineering and how tinkering, inventing, and building can spur creativity and innovation. Findings suggest growing interest in making things involving electronics among youth in the U.S. Female makers were found to be more likely to have engineering or computer and information science degrees than any other credential. Girls associated their interest with a desire to learn to make things, increase knowledge, and solve problems. Recommendations include key actions for parents, educators, policy makers, and the private sector to support access and engagement activities for youth.
www-ssl.intel.com/content/dam/www/public/us/en/documents/reports/makers-report-girls-women.pdf

College and Career Ready Student Programs, Institute for Public School Initiatives, November 2014
This paper provides an overview of the advantages of early college high schools and several strategies used in Texas and other states to ensure that students are college and career ready upon graduation. Three things that college and career campuses are found to have in common include 1) engaged business partners, 2) curriculum focused on one major area of concentration (endorsement), and 3) professional development designed to assist teachers in connecting the endorsements to their academic content area. The examples of state approaches to early college high schools offered in the paper demonstrate effective business and industry engagement leading to stronger curriculum support and professional development that aligns academic instruction with industry application.
www.ontrack-media.net/publications/College%20and%20Career%20Ready%20Student%20Programs.pdf

Blueprint for College Readiness, Education Commission of the States, October 2014
A resource for states that are working to improve student success and the transition from high school into postsecondary education, this report provides a 50-state analysis of 10 college readiness and success policies that are considered to be the most critical. It explores the extent to which each state is implementing the policies and provides resources designed to meet each state's unique needs. Four high school and four postsecondary policies are considered in addition to two bridge policies that improve the transition between the two systems. Individual state profiles are included. Texas met seven of the 10 college readiness policies emphasized in the blueprint, whereas nationally states met an average of six of the 10 indicators. Also spotlighted is Texas' campus and school district accountability system as a leading example of policy for other states to follow. The authors further encourage Texas to consider developing statewide or system-wide requirements for admission.
www.ecs.org/docs/ECSBlueprint.pdf

The Condition of College & Career Readiness 2014*: National Report*, ACT, August 2014
This national report illustrates the college and career readiness of the ACT-tested high school class of 2014. The results represent the achievement of only the students that are tested—or, 57 percent of the 2014 U.S. graduating class. Findings indicate an increase in the diversity of the test-taking population and an 18 percent increase in the number of ACT-tested graduates since 2010. The report points to opportunities for improvement in college and career readiness in specific content areas and tracks the percentage of students aspiring to postsecondary education with the percentage of those who actually enroll. The ACT College Readiness Benchmarks are scores on the ACT assessment that represent the level of achievement required for students to have a 50-percent chance of obtaining a B or higher or a 75-percent chance of obtaining a C or higher in corresponding credit-bearing first-year college courses.
www.act.org/research/policymakers/cccr14/pdf/CCCR14-NationalReadinessRpt.pdf

Career and Technical Education

***Skills beyond School: Synthesis Report*, OECD Reviews of Vocational Education and Training,** OECD Publishing, November 2014
Vocational education and training play a more significant role in workforce skills development than commonly understood. This study explores the variable nomenclature, qualification systems, and framework of this sector of postsecondary education across some 20 countries. Fragmentation in this sector poses barriers to effective communication of postsecondary pathways to occupations that are in demand, many of which do not require traditional baccalaureate degrees. *Professional education and training* is proposed as the internationally acceptable description of substantial postsecondary vocational education programs—programs that require more than six months and less than three years of full-time study. The programs reviewed in the study serve a variety of purposes, including job-specific training for entry-level youth, skill enhancement training for mid-career adults, second chances for individuals who dropped out of formal education, and opportunities for those making career transitions. Key elements of high-quality professional education and training programs are cited.
www.oecd-ilibrary.org/education/skills-beyond-school_9789264214682-en

STEM Challenges and Solutions in the Hinterlands, Education Commission of the States, November 2014
Through the use of technology, states are addressing common challenges to science, technology, engineering, and math (STEM) education in rural areas; namely, the lack of qualified teachers and teacher mentors, fewer math classes, inadequate labs, and inadequate bandwidth to implement some

technology solutions. According to this brief, technology is expanding access to instructors and providing experiences that improve STEM instruction and learning outcomes; however, some 70 percent of America's schools lack the internet speeds necessary to use technology to prepare students for college and test them on the new college readiness standards. The brief highlights what several states are doing to embrace technology and overcome some immediate obstacles.
www.ecs.org/clearinghouse/01/15/58/11558.pdf

Rigorous Tests of Student Outcomes in CTE Programs of Study: Final Report, National Center for Career and Technical Education, April 2014
Findings of this report suggest that states attempting to prepare more students for high-skill jobs should consider programs of study as a framework for increasing high school students' engagement, achievement, and transition to postsecondary education and training programs. This report shows the results of a four-year longitudinal field study of 6,638 students in three large, urban school districts in three states. The study compares students attending regular comprehensive high schools with students enrolled in schools offering programs of study in subject areas such as the health sciences, engineering technology, and alternative fuels to automotive technology, business and marketing, and culinary and hospitality. While achievement varied by district, earning more career and technical education (CTE) credits was associated with graduation across all three districts. Additionally, findings suggest that students in programs of study that combine college-ready academics with rigorous, industry-driven career-technical studies not only earned higher grade point averages in CTE classes, but also outperformed their peers on the number of credits they earned in STEM and advanced placement classes. The programs of study model also demonstrated a positive influence on students' college aspirations.
www.nrccte.org/sites/default/files/publication-files/nrccte_cte_programs_of_study_career_pathways.pdf

STEM 101: Intro to Tomorrow's Jobs, Occupational Outlook Quarterly, Bureau of Labor Statistics, Spring 2014
STEM occupations are identified in a variety of ways. There is no standard definition of STEM, although the four fields of STEM are closely related and build upon each other. Through the collaboration of multiple federal agencies that analyzed almost 100 occupations, an overview of STEM occupations was developed using a list based upon the Standard Occupational Classification Manual. This brief analyzes the occupations and descriptions of six fields, including life, physical, and social sciences; computer science; architecture and engineering; and mathematics. Those fields with the most employment potential and projected job openings are highlighted. The report also considers STEM occupations with rapid growth and wages and the less tangible rewards and challenges associated with the occupation. Resources for additional information are provided to help individuals prepare for a career in a STEM field.
www.bls.gov/careeroutlook/2014/spring/art01.pdf

Clusters and Sector Strategies

Celebrating Success, Achievement and Potential of Women in Manufacturing: A Leadership View of Overcoming the Talent Crisis and Filling the Skills Gap, Deloitte Consulting and The Manufacturing Institute, December 2014
A poor public perception—lack of growth, work environment, and gender bias—has been a key challenge for the manufacturing industry. The resulting skill shortages have turned the focus of industry leadership toward efforts to recruit, retain, and promote women. Executive leadership representing

diverse sectors of manufacturing met to discuss employer skill needs and challenges and collectively determine how to address them. Solutions include the commitment of executive leadership in integrating women into the corporate strategy and culture, sharing internal best practices, setting the expectation of proactive change at every level of the organization, developing female mentors to engage with schools, and ensuring that men within the organization are equally involved and have meaningful roles and responsibilities in the transition. The forum was also used to discuss the public perception of the industry, and what companies can do to create a strong employer brand.
www.themanufacturinginstitute.org/Research/Other-Institute-Reports/~/media/F6FCC12CD5D24F15B3DB1D8A6AE6E718.ashx

The Space Economy at a Glance 2014, OECD Publishing, November 2014
Recent research on global value chains shows that product and service supply chains for space systems are internationalizing at a rapid pace and playing an increasingly pivotal role in economic development. Many more corporations across a wide range of industrial sectors and countries participate in space-related ventures. This report uses data from over 40 countries with space programs, builds on previous analyses of global value chains, and includes new patent and trade data. The global space sector employs at least 900,000 highly skilled professionals—around 350,000 in the U.S.—mainly design engineers, technicians, and scientists. University and military personnel are not included in this estimate. The report recommends improvement in the sharing of evidence-based information with decision makers and citizens and in developing mechanisms for transferring know-how and experience among practitioners.
www.oecd.org/sti/the-space-economy-at-a-glance-2014-9789264217294-en.htm

Out of Inventory: Skills Shortage Threatens Growth for U.S. Manufacturing, Accenture and The Manufacturing Institute, May 2014
This 2014 manufacturing skills and training study finds promising growth in the manufacturing sector in the U.S. Nearly a quarter of industry employers indicated plans to grow their U.S.-based manufacturing by 10 percent over the next five years. More than 50 percent plan to increase production jobs by at least five percent. However, the shortage of skilled workers for production and innovation is expected to negatively affect earnings and growth. It is suggested that skills shortages will cost manufacturers up to 11 percent of net earnings. Manufacturers are responding by investing in skills training at an annual cost of approximately $3,000 for each new hire and $1,500 per incumbent employee. Recommendations for employers to overcome skills difficiencies include offering digital learning experiences, combining formal and informal training, and encouraging certification and apprenticeship to expand the talent supply.
www.accenture.com/SiteCollectionDocuments/PDF/Accenture-2014-Manufacturing-Skills-Training.pdf

Untapped Resource: How Manufacturers Can Attract, Retain, and Advance Talented Women, The Manufacturing Institute, February 2013
Based on input from women currently working in manufacturing, this report provides an overview of the current state of female employment in the industry. Employers maintain that skills shortages are detrimental to productivity and innovation that would allow them to benefit from current industry growth. The industry is looking to recruit more women to fill skills shortages. Making the case for more women to consider careers in manufacturing, this report offers recommendations to industry leaders on how to improve the image of the industry and other changes that are necessary in order to recruit, retain, and advance more women. Strategies suggested include addressing gender bias, flexible scheduling, internal mentors, and professional development as well as building a strong employer brand.
www.themanufacturinginstitute.org/~/media/D0D064208A994D6A91B0E51CF008BF23.ashx

Competitiveness

Manufacturing Development in Texas, Texas Comptroller of Public Accounts, December 2014
To identify the reasons that manufacturing firms locate their operations in other states despite having been offered incentives by the State of Texas, this study explores manufacturing site location projects that ultimately located elsewhere. No single factor was found to be responsible for direct investment losses to other states. The study did find that decisions on investment in the location of manufacturing firms generally appear to occur early in the site selection process, before offers of economic incentives are made. Recommendations to improve manufacturing development in Texas include increasing emphasis on training and workforce development; streamlining the incentive programs offered by multiple state agencies through a coordinated, transparent process; ensuring that communities have flexibility and tools to customize incentive packages; and evaluating economic incentive programs.
www.texasahead.org/lga/finances/manufacturing/96-1771.pdf

Aging and Beneficial Purpose in the 21st Century, Milken Institute, October 2014
Both this report and the recommendations made during the *2014 Successful Aging Innovation Summit: Work, Productivity, and Beneficial Purpose* recognize a need to accelerate the response to the demographic shift caused by the retirement of the Baby Boom generation. Participants in the summit considered issues and opportunities ranging from the communities that attract older and retired workers to dated vocabulary. With regard to the topic of workforce development, the report calls for a reconceptualization of aging and work as people choose to continue their professions or seek new and different opportunities. It examines the advantages of older workers and age diversity in the workplace, citing a corporate case study of an intergenerational workforce. Given the growth of this demographic and its economic influence, participants in the summit recommend that public policies ensure that this human capital resource is mobilized and maximized. Universities are encouraged to teach the value of older workers to provide a more educated perspective on aging and the potential of older workers.
assets1b.milkeninstitute.org/assets/Publication/Viewpoint/PDF/AgingSummit-fnl-pg2.pdf

Charting New Pathways to Higher Education: International Secondary Students in the United States, Institute of International Education, July 2014
Enrollment of international students for long-term study and a secondary school credential in the U.S. as a pathway to higher education is increasing. Similar to exchange students, these students enhance internationalization efforts and help to develop global perspectives and competencies of American students. This study provides an overview of the presence, characteristics, and preferences of globally mobile students—exchange students and diploma-seeking students—in U.S. high schools. Exchange students make up 33 percent of all international secondary students and hail primarily from Europe. The 67 percent of students enrolled to earn a U.S. high school diploma come from various world regions, enroll primarily in private schools, and are particularly interested in the academic features of the schools. The findings of the study can help education stakeholders develop programs that enhance the cross-cultural learning of all students. Texas is a leading host state to exchange students. The state is also a host to many enrolled, diploma-seeking students, hosting over 2,500 international secondary students in 2013. The majority of these students were from Mexico, China, South Korea, and Vietnam.
www.iie.org/~/media/Files/Corporate/Publications/IIE-International-Secondary-Students-In-The-US.ashx

The Rise of Innovation Districts, Brookings Institute, May 2014
As the practice of intentional innovation is maturing, new geographical centers are emerging in cities and metropolitan areas all over the world. This report examines this shift in the landscape of innovation. Centers of innovation have most often developed on isolated, suburban corporate campuses. Today,

leading-edge, knowledge-intensive institutions and companies from disparate sectors are beginning to cluster in urban, yet physically compact, innovation districts in order to increase collaboration informing the creation of new products, technologies, and market solutions. Driven by the lifestyle preferences of people and companies and the need to revitalize urban centers, these districts are beginning to demonstrate distinctive characteristics and opportunities for formal planning and economic development.
www.brookings.edu/~/media/Programs/metro/Images/Innovation/InnovationDistricts1.pdf

Data

Crossing Boundaries: Regional Data Sharing to Study Worker Mobility, Workforce Data Quality Campaign, December 2014
Increasing interest in the labor market outcomes of graduates from postsecondary education and workforce development programs is prompting the exploration of in-state and multi-state data-sharing agreements that link education and employment outcomes. This report provides background and case studies that demonstrate the feasibility of forming regional/multi-state data-sharing agreements. It describes the steps in the data exchange to link secondary education, postsecondary education, and employment data to facilitate the tracking of employment outcomes and graduate mobility. Findings suggest that exchanging data across state boundaries helps to fill significant gaps in each state's data and gives state leaders a more comprehensive understanding of employment outcomes of graduates, which supports workforce planning.
www.workforcedqc.org/sites/default/files/images/WDQC%20crossing%20boundries-web%20version-final.pdf

Texas Population Projections, 2010 to 2050, Office of the State Demographer and Texas State Data Center, November 2014
Containing a snapshot of the statewide population projections for 2010 to 2050, this document suggests that the fastest growth is projected for the suburban counties of large urban areas such as Bexar, Dallas, Harris, Tarrant, and Travis counties. While the Hispanic population will become the majority by 2042, the Asian American population is projected to grow at the fastest rate. Texans at or nearing age 65 will more than triple by 2050, at which time the state is expected to have reached a total population of 54.4 million.
www.osd.state.tx.us/Publications/2014-11_ProjectionBrief.pdf

Evidence-Based Policymaking: A guide for effective government, The Pew Charitable Trusts and MacArthur Foundation, November 2014
The benefits gained by advances in technology, access to data, and the ability to more accurately measure the performance and cost-effectiveness of government services provide policy makers with tools to be more strategic in their selection and funding of public programs. This comprehensive framework was developed through a review of research and in-depth interviews with policy makers and academic experts. Key components are presented with multiple steps that provide clear guidance on using this approach to policy making. The components include (1) program assessment, (2) budget development, (3) implementation oversight, (4) outcome monitoring, and (5) targeted evaluation.
www.pewtrusts.org/~/media/Assets/2014/11/EvidenceBasedPolicymakingAGuideforEffectiveGovernment.pdf

Supply Demand

Bridge the Gap: Rebuilding America's Middle Skills, Harvard Business School, Accenture and Burning Glass, November 2014
Sustained competitiveness requires a collaborative effort among the major stakeholders in America's skills development system. This report recommends a collective effort by business, education, and government toward workforce development for middle-skill occupations. It differentiates middle-skill jobs, focusing on those jobs that create value for businesses, provide competitive wages and clear pathways to increasing lifetime earnings for many workers, and are persistently difficult to fill. This analysis found a link between a skills shortage of qualified candidates and the economic importance of certain middle-skill occupations. Recommendations made in the report include encouraging business leaders to apply the same rigor and discipline to sourcing middle-skill talent as they apply to their materials supply chains. The report also suggests an increase of labor market and career information that informs students' career exploration and understanding of career pathways into employment. Finally, it urges policy makers to actively foster collaboration and the alignment of resources of the education and training systems with the needs of employers. The appendices include a list of initiatives designed to close the middle-skills gap.
www.hbs.edu/competitiveness/Documents/bridge-the-gap.pdf

Managing the Talent Pipeline: A New Approach to Closing the Skills Gap, U.S. Chamber of Commerce, November 2014
To find skilled workers and keep pace with the changing needs of industry, employers across the country discussed lessons learned from innovations in supply chain management in an effort to develop a demand-driven approach to workforce development. The report first presents the need for a demand-driven system. It then introduces supply chain management. Rising costs, growing business uncertainty, and longer time needed to fill positions led to several innovations in supply chain management that are detailed in this report. Three foundational principles of talent pipeline management form the basis of the demand-driven system outlined in the report. The principles are employers drive value creation, employers organize and manage scalable network partnerships, and outcome measures and incentives drive performance. Strategies and a checklist of requirements for each stakeholder in the talent management system are included.
www.uschamberfoundation.org/sites/default/files/media-uploads/Managing%20the%20Talent%20Pipeline_0.pdf