Texas Workforce Investment Council

Policy News Highlights

Issue 30, Quarter 2, June 2015

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

Doubling Graduation Rates: Three-year Effects of CUNY's Accelerated Study in Associate Programs for Developmental Education Students, MDRC, February 2015
According to this study conducted to inform developmental education reform, this comprehensive, long-term program designed to help more students graduate college yielded substantial results. The evaluation targeted low-income community college students who needed one or two developmental courses to build math, reading, or writing skills. The program requires full-time enrollment with consolidated block scheduling in the first year. Other key components include a non-credit seminar covering topics such as goal-setting and academic planning; comprehensive student advising and tutoring; career and employment services; a tuition waiver; public transportation vouchers; and free textbooks. Student credit accumulation, degree attainment, and transfer from a 2-year to a 4-year institutions are reported in addition to enrollment. Findings show that the program helped a variety of students and almost doubled graduation rates over three years. The cost per degree was lower in the program than in the control condition despite the substantial investment required.
www.mdrc.org/sites/default/files/doubling_graduation_rates_fr.pdf/

Apprenticeship

Employer's Playbook for Building an Apprenticeship Program, The Manufacturing Institute, December 2014
Apprenticeship programs are designed to provide workers with advanced skillsets that meet individual employer needs. This playbook highlights the combined experiences of three employers—Alcoa, The Dow Chemical Company, and Siemens Corporation—that offer programs in a variety of locations, their training requirements, and the sizes of local facilities. The model brings together employers and community colleges to design structured learning pathways that document learning on the job, online, or in the classroom, which often lead to industry-based certification. The playbook covers multiple approaches to apprenticeship including competency-based programs. A step-by-step guide through the process is included to guide employers through workforce planning, developing partnerships, recruitment, monitoring, and transition planning to effectively guide employees out of apprenticeship into employment within the organization or to an established network of industry partners.
www.themanufacturinginstitute.org/~/media/53456D700856463091B62D1A3DA262F4/Full_Apprenticeship_Playbook.pdf/

Career and College Readiness

Does Not Compute: The High Cost of Low Technology Skills in the U.S.—and What We Can Do About It, Change the Equation, June 2015
Findings presented in this brief suggest that 91 percent of millennials do not understand that a lack of technical skills may negatively affect their career outcomes. Only 37 percent of employers agree that recent college graduates are well prepared to stay current on new technologies. Results show that on average, a person at the highest technology skill level earns almost 40 percent more than someone at the lowest skill level. This holds true even if the two people are of the same race, gender, and education level, and have generally the same literacy and numeracy skills. Focusing on test takers between the ages of 16 and 34 and on problem solving in technology-rich environments—or being able to apply technology to solve complex problems—this brief challenges a widespread assumption that millennials are tech savvy and measures the impact of their technology skills on their career prospects.
www.changetheequation.org/sites/default/files/CTE_VitalSigns_TechBrief.pdf/

OECD Skills Outlook 2015: Youth, Skills and Employability**,** OECD, May 2015
A comprehensive approach to improving employment prospects for youth and young adults is presented in this report. It estimates the number of 16–29 year olds across OECD countries that are neither employed nor in education or training—some 39 million in 2013. The issues considered include: the concern that educational investments are not realized when the skills acquired are not put to productive use; the fact that some youth leave education without acquiring the right skills or lack any kind of work-based experience that validates their skills; and that others successfully enter the labor market, but are underemployed and unable to use the skills acquired to advance their careers. Recommendations suggest efforts that ensure that all young people leave their education with a range of relevant skills, engage employers in developing work-based learning opportunities, eliminate barriers to youth employment, create an environment that ties temporary jobs to stable employment as stepping stones, and work to reduce the incidence of mismatch between employer needs and worker skills.
www.oecd.org/publications/oecd-skills-outlook-2015-9789264234178-en.htm

Higher Education and Workforce Policy: Creating More Skilled Workers (and Jobs for Them to Fill), Brookings Institution, April 2015
Three sets of policies are offered for consideration in this brief that examines workforce trends associated with slow growth of employment in the new middle-skill jobs and low worker skills attainment. The new middle-skill jobs require some postsecondary education and training, but not necessarily of four-year degree. Educational completion rates remain low, and many graduates do not obtain credentials in fields that the labor market values. Therefore, earnings among graduates are inconsistent thereby presenting challenges to determining occupational demand. This transition to higher skill requirements in the middle of the labor market and the value it places on credentials requires more public spending and workforce development efforts that are more focused on higher education. Recommendations include providing more resources to community colleges with incentives that emphasize completion and earnings; expanding high quality career and technical education aligned with work-based learning opportunities; and creating incentives for employers to support job creation.
www.brookings.edu/~/media/research/files/papers/2015/04/workforce-policy-briefs-holzer/higher_ed_jobs_policy_holzer.pdf/

Revisiting the STEM Workforce, National Science Board, April 2015
A complement to the *Science and Engineering Indicators* report, this report builds on decades of data related to the science and engineering (S&E) workforce to inform discussions about the science, technology, engineering, and math (STEM) workforce. Distinctions are made between S&E and STEM in order to define STEM and STEM-capable workers and offer a more inclusive understanding of a STEM-capable workforce. Three primary insights are presented. The STEM-capable workforce is extensive—responsible for research and design, development and adoption into various industries, and use of technological innovation to accomplish occupational tasks—and STEM knowledge and skills are critical to innovation and competitiveness. Multiple, non-linear education and workforce training pathways are a distinctive feature of the U.S. workforce and enable workers and employers to apply STEM skills in value-added roles across the economy. Strengthening these pathways is essential to develop the STEM capabilities required of the workforce. Recommendations suggest that stakeholders assess, enable, and strengthen career pathways for all students and incumbent workers in order to create, sustain, and strengthen the workforce. An interactive web tool of STEM pathways is included.
www.nsf.gov/nsb/publications/2015/nsb201510.pdf/

Lifelong Learning Skills for College and Career Readiness: Considerations for Education Policy, American Institutes for Research, April 2015
This summary isolates key considerations for integrating lifelong learning skills into education. Lifelong learning refers to a broad set of competencies, behaviors, and abilities that complement rigorous academic study and contribute to intellectual and emotional maturity, professionalism, and good citizenship. Based upon an annotated bibliography, the summary offers a consolidated overview organizing the institutional and individual influences associated with preparation for college and career and summarizing a representative sample of lifelong learning research. Key takeaways from the research serve as a quick guide to help policymakers and educators integrate foundational lifelong learning skills into college and career readiness initiatives. The resources help to establish and promote pathways, set goals and expectations of the competencies, and measure school and student grades.
www.ccrscenter.org/sites/default/files/CCRS%20Lifelong%20Learning%20Skills%20Policy%20Considerations.pdf/

Career and Technical Education

The Economic Value of College Majors, Georgetown Center on Education and the Workforce, May 2015
Analyzing earnings associated with 137 college majors, this report concludes that a student's selected major has a more significant impact on earnings than the chosen degree program. College graduates' earnings continue to increase throughout the career, and as wages increase, the differences among majors becomes more apparent. The most popular college majors are examined as well as the majors that are most likely to lead to an advanced degree. Findings suggest that 80 percent of students choose a major linked to a career while 20 percent major in humanities, liberal arts, social sciences, and arts. STEM, health, and business majors are the highest paying, and economics and business are the only two non-STEM majors among the top 25 highest-earning majors. An interactive tool allows navigation through all 137 majors to explore earnings by degree attainment or the median career earnings by state and national data.
cew.georgetown.edu/wp-content/uploads/Economic-Value-of-College-Majors-Full-Report-v2.compressed.pdf

Beyond College Rankings: A Value-Added Approach to Assessing Two- and Four-Year Schools, Brookings Institute, May 2015
Based upon growing evidence that policies and programs offered by colleges have significant effects on the students and communities that they serve, this report considers five key college quality factors in its assessment of college performance that most effectively predict the economic outcomes of alumni. The factors include curriculum value, alumni skills, STEM orientation, completion rates, and student aid. As defined in this study, these value-added factors measure the difference between actual alumni outcomes and predicted outcomes for institutions with similar characteristics and students. This approach is moving toward assessing programs that effectively prepare graduates for in-demand occupations.
www.brookings.edu/~/media/research/files/reports/2015/04/29-college-value-add/bmpp_collegevalueadded.pdf/

The State of Career Technical Education: Employer Engagement in CTE, National Association of State Directors of Career Technical Education, December 2014
While employers have made longstanding contributions to career and technical education (CTE) programs, this report provides insight from a survey of 47 state CTE directors conducted to identify consistent and systematic practices of employer engagement across the country. In this context, an employer is defined as an individual or organization that can represent the workforce in one or more industries. Survey findings suggest that states are accelerating employer engagement in their CTE systems. A majority of states require or encourage local advisory committees and have policies and programs that foster employer engagement. Work-based learning, employer-related professional development, participation in the review of state CTE standards and credentials, and collaboration with workforce and economic development initiatives are among the highlighted approaches.
www.careertech.org/sites/default/files/State-of-CTE_Employer-Engagement_FINAL.pdf/

Competitiveness

Universal Basic Skills: What Countries Stand to Gain, Organisation for Economic Co-operation and Development, June 2015
Based on the results of international assessments of student learning outcomes, this report considers the economic implications of improved school outcomes. It compares how well the school systems in some 76 countries prepare young people to creatively and critically apply what they know to solve complex problems. Findings demonstrate that the quality of schooling in a country is a powerful indicator of long-term economic success. In high-income countries, like the U.S., the findings suggest an average 3.5 percent increase in future gross domestic product, which is close to what these countries currently spend for the primary and secondary education of all students. The analyses in the report rely on the assumptions that a better-educated workforce produces ideas that result in technological progress and that improved skills will be used in an economy that actively pursues adding high demand jobs. While development of these skills requires sustained effort and investment in people, the report demonstrates significant improvements in performance across multiple countries.
www.oecd.org/edu/universal-basic-skills-9789264234833-en.htm/

Framework for State Action on Global Education, Partnership for 21st Century Learning, 2015
This action framework for implementing global education as a seamless part of state education systems is based on the premise that every student should develop the attitudes, skills, and knowledge to understand and participate in a globally connected world. It is designed for states that are beginning to develop a global education agenda. Six essential beliefs anchor the framework: teachers must be globally competent; language learning must be transformed and leveraged; knowledge networks must be utilized to build commitment and community; global experiences empower new ways of thinking; partners are critical to success; and successful pilots must support policies to ensure scale, sustainability, and equity of access. Global competency standards, scalable resources, immersion strategies, whole-school models, and more are among the defining elements of this approach.
www.p21.org/storage/documents/Global_Education/P21_State_Framework_on_Global_Education_New_Logo.pdf/

A Guide to Upskilling America's Frontline Workers: A Handbook for Employers, Deloitte for The Aspen Institute, June 2015
On the premise that one of the most effective ways to address the skills shortage and build a sustainable talent management strategy is to train and develop existing employees, this handbook discusses the benefits of upskilling initiatives. Upskilling is a strategy that promotes pathways within the incumbent workforce whereby entry-level jobs serve as stepping stones to career pathways. Effective practices and tools used by industry partners are provided to support widespread adoption and implementation. Among the industry case studies included, manufacturing is highlighted to illustrate a strategy to incorporate industry-based certifications into hiring and employee advancement processes. In this case, employees were incentivized to complete a series of training modules. The results show productivity improvement of 31 percent, a 23 percent increase in employee engagement, and additional benefits to safety, quality, and worker autonomy.
www.upskillamerica.org/wp-content/uploads/2015/04/Upskilling_Employer_Handbook_042015.pdf

Issue Brief: Creating Opportunity and Prosperity through Strengthening Rural-Urban Connections, National Association of Development Organizations Research Foundation, May 2015
Rural and metropolitan regions are highly interdependent offering each other complementary economic assets and services and diverse cultural and recreational opportunities. However, a recent study

suggests that investments in rural economies often create more economic benefits for the urban centers than for the rural communities within a region, whereas urban investments do not necessarily supply similar benefits to rural economies. Case studies of rural-urban linkages offer three broad approaches to help regional development organizations strengthen these connections. Recommended actions include making accommodations for distance and lack of economies of scale and expanding economic development through strategies that include broadband development, disaster resilience, transportation, and food systems.
www.nado.org/wp-content/uploads/2015/06/RuralUrbanConnections_FINAL_.pdf

***Career-Technical Education and Labor Market Outcomes: Evidence from California Community Colleges* (Working Paper),** Center for Analysis of Postsecondary Education and Employment, May 2015
Increasing unemployment and declining wages among individuals without college degrees are driving interest in identifying more effective education and training pathways for those unlikely to earn a four-year degree. At the same time, community colleges are growing enrollment and refocusing efforts on student advising and completion in order to ensure better outcomes for their students. This study estimates the earnings returns to career and technical education (CTE) programs in the nation's largest community college system. Findings suggest average returns from 12 to 23 percent to certificates and degrees when healthcare is included. Non-healthcare CTE program returns range from 5 to 10 percent.
www.capseecenter.org/wp-content/uploads/2015/05/career-technical-labor-market-outcomes.pdf/

The Global STEM Paradox, Global STEM Alliance, The New York Academy of Sciences, January 2015
In order to resolve the global shortage of skilled STEM workers, this white paper recommends developing adaptable STEM ecosystems supported by government policies, business incentives, and cultural attitudes. The global STEM paradox is described as a challenge that requires a collaborative global response given the mismatch between students graduating in STEM fields and STEM jobs in both emerging and developed countries that go unfilled. Shortages of graduates with soft skills, lack of qualified technicians, losses of high-skilled workers to other locations, and untapped talent among the underrepresented populations are cited as primary reasons for this imbalance. Research on developing innovation ecosystems was considered in the development of the recommendations, and case studies suggest that while few countries have managed to create such an ecosystem, those that have are achieving social and economic progress.
www.nyas.org/asset.axd?id=f7e75db3-3a43-425a-b0f1-0f2c7179fab5/

NMC Horizon Report—2015 K12 Edition, New Media Consortium, June 2015
Summaries of the findings of key trends, challenges, and developments in educational technology for the upcoming 2015 K12 Edition are offered as a preview to this annual report. The trends continue to focus toward empowering students to take greater ownership of their learning through strategies that personalize and measure learning and that engage students through collaborative and hybrid learning approaches. New designs for learning spaces and school models continue to evolve in support of transdisciplinary approaches that are more fluid and student-centered and address the need for 21st century skills. These approaches allow more flexibility to support opportunities for applied learning that engages the students as creators, addressing the long-term trend toward developing a mindset for innovation. Mobile learning, makerspaces, bring-your-own-device strategies, and cloud computing are among the technologies that are expected to be adopted into the broader education system in less than one year.
www.cdn.nmc.org/media/2015-nmc-horizon-report-k12-EN.pdf/

Data

From College to Jobs: Making Sense of Labor Market Returns to Higher Education, The Aspen Institute, April 2015
Use of labor market data can reveal significant variation in the value of different postsecondary programs and pathways. This report brings together key findings from a number of recent analyses that link postsecondary education to labor market outcomes. The data sources and limitations of existing data for answering detailed questions are included. Findings confirm that college credentials generally result in higher income; however, that income does not always result in a positive return on investment. Enrollment patterns suggest that students often make choices that are not informed by the labor market, although the returns vary significantly by field of study and type of degree. This summary report emphasizes the benefits of using labor market information to inform postsecondary pathways and emphasizing multiple, cumulative credentials that support continuous career advancement.
www.aspeninstitute.org/sites/default/files/content/docs/pubs/LaborMarketReturns_0.pdf/

The Growing Distance between People and Jobs in Metropolitan America, Brookings Institute, April 2015
Where jobs and people move within regions can affect the employment outcomes of residents related to length of job searches, period of joblessness, and the likelihood of job retention—particularly for economically disadvantaged populations. This report explores job proximity—how many jobs are located with people living nearby. Findings suggest that employment growth does not necessarily increase the number of jobs in close proximity to residents. The number of jobs near both the typical city and suburban resident fell even as suburban employment grew after the Great Recession. Between 2000 and 2012, jobs within a typical commute distance fell in many major metro areas. As poor and minority residents relocate to the suburbs, the proximity to jobs fell more than for non-poor and white residents. The findings emphasize the need for regions to combine economic development strategies with planning around regional housing and transportation to promote sustainable development patterns.
www.brookings.edu/~/media/research/files/reports/2015/03/24-job-proximity/srvy_jobsproximity.pdf/

Job Market Polarization and U.S. Worker Skills: A Tale of Two Middles, Brookings Institute, April 2015
Globalization and advances in technology are contributing to a polarization of the U.S. job market that is particularly evident among middle-skill jobs, according to this report. Traditional middle-skill jobs have been declining while another set of middle-skill jobs, primarily those that require some postsecondary education and training, are experiencing rapid growth. Employers complain about difficulty finding skilled workers for these jobs, yet they are cutting back on training expenditures and are not raising employee wages to attract or retain skilled workers. This report explores how to best define the middle of the labor market, looks at changes in old and new occupations that fall in that category, and considers emerging trends in education and training among employers, workers, and educational institutions. Recommendations include providing more resources and incentives to colleges, expanding apprenticeship and career and technical education programs, and incentivizing employers to create more jobs.
www.brookings.edu/~/media/research/files/papers/2015/04/workforce-policy-briefs-holzer/polarization_jobs_policy_holzer.pdf/

Community College Completion Report, American Association of Community Colleges, April 2015
This report presents progress against a goal set by six national community college organizations in 2010 to produce 50 percent more students with degrees and certificates by 2020, while also increasing access and quality. Using data from the National Student Clearinghouse, the report captures the community college contribution to the number of students earning their first credential from a community college, those with subsequent credentials from community colleges, and those who transfer and earn a degree at a four-year college without first earning a credential at the community college. The limitations of the data sources in the context of the economic environment and its impact on enrollment and completion are explained. Early results demonstrate that the initiative has been effective. For students who were 24-years old or younger—a key target population for colleges—the rate of increase in new awards is small, but steady, and the retention rate looks promising. Progress on the completion rate appears less promising but requires further evaluation.
www.aacc.nche.edu/AboutCC/Trends/Documents/completion_report_05212015.pdf/

Contingent Workforce: Size, Characteristics, Earnings, and Benefits, Government Accountability Office, April, 2015
Millions of workers serve in temporary or other non-standard employment. Referred to as contingent workers, these individuals may not have health care, retirement, or other benefits and safeguards. This report considers the size of a defined core of the contingent workforce and compares the characteristics and employment experiences of these workers to standard workers. Found to comprise 7.9 percent of the employed labor force in 2010, these workers experience higher job instability and lower job satisfaction, according to this analysis. These workers are less likely to have a high school diploma and more likely to earn a low income. Earnings, benefits, and measures of poverty all differ between contingent workers and workers with standard employment, with some variation by industry and occupation. Findings also suggest greater reliance on public services.
www.gao.gov/assets/670/669766.pdf/

Education Longitudinal Study of 2002 (ELS:2002): A First Look at the Postsecondary Transcripts of 2002 High School Sophomores, National Center for Education Statistics, April 2015
Examining the educational experiences of a nationally representative sample of high school students who were sophomores in the spring of 2002, this report presents a small but descriptive subset of variables that can be examined with ELS:2002 data. This analyses explores educational attainment, courses taken and choice of major, degree completion, and accrual of credit of the students in the study. Selected findings are presented on the 84 percent of the spring 2002 high school sophomores with subsequent postsecondary enrollment as of the 2012–2013 academic year.
www.nces.ed.gov/pubs2015/2015034.pdf/

Smart Investments, Real Results: A Net Impact Evaluation Framework for Minnesota's Workforce Development System and Initial Findings, Minnesota Department of Employment and Economic Development, January 2015
This report details the development, methodology, and initial results of the net impact evaluation framework implemented through a small-scale pilot in Minnesota since 2012. The pilot focused on the core, intensive, and training services offered under two major workforce development programs: the Workforce Investment Act (WIA) adult and dislocated worker programs. The goal of the pilot was to inform the development of a net impact evaluation framework and to establish the necessary data procedures to prepare for the implementation of an ongoing performance management process. The primary findings determined that the framework is feasible for many workforce programs and that state

agencies had made significant progress in data-sharing relationships that will drive continued progress. The pilot also identified challenges of this approach when applied to small programs and populations.
www.mn.gov/deed/images/Workforce_Development_Net_Impacts.pdf/

Disabilities

Next Steps: Life after Special Education, Texas—State Graduation Brief, a Special Supplement to Diplomas Count 2015, Education Week Research Center, June 2015
This state graduation brief contains national and Texas-specific data on the achievement levels, discipline rates, and high school outcomes of students in the special education system. The national population profile is presented along with informative highlights on post-high school engagement, postsecondary completion, and comparative data on the types of disabilities and performance. In Texas, as across the nation, the majority of these students are found to spend over 40 percent of the day in the same classroom as their non-disabled peers. The *Diplomas Count* report calls attention to the point of transition from secondary into postsecondary education and the workforce where students with disabilities must continue to address their challenges without the special supports received through special education. The authors recommend greater focus on helping these students to develop self-advocacy skills and improvements to postsecondary transition planning.
www.edweek.org/media/ew/dc/2015/sgb/33sgb.tx.h34.pdf/

Supply Demand

New Skills at Work: Preparing Houston to Skill Up, Addressing the Skills Mismatch to Meet Employer Demand in High-Growth Industries, Jobs for the Future for JPMorgan Chase & Co., November 2014
A five-year initiative, the authors and collaborators in New Skills at Work recognize that persistent unemployment combined with rapid growth in middle-skill occupations indicates a mismatch between the skills that employers need and the training opportunities available to job seekers. Finding the occurrence of this mismatch in a variety of regions and industries around the globe calls for dynamic, demand-driven workforce development solutions. One in a series of reports on a select group of economic regions across the U.S., this report examines the labor market in Houston and provides recommendations to help prepare youth and adults for careers in high-demand, middle-skill occupations within the region. Specific steps are provided to align career pathways with key middle-skill jobs to increase economic mobility for job seekers and to strengthen regional economies. Other Texas regions participating in the initiative include Austin, Dallas, El Paso, Fort Worth, Rio Grande Valley, and San Antonio.
www.jff.org/sites/default/files/publications/materials/54841-JPMC-GAP-HOUSTON-AW5-ONLINE-2.pdf/

Training

Not As Hard As You Think: Engaging High School Students in Work-Based Learning, Jobs for the Future, June 2015

Addressing employer concerns about providing work-based learning experiences for youth, this brief emphasizes the benefits of these experiences to employers and students. It highlights the skill-building benefits of youth employment and offers a continuum of work-based experiences that employers can offer at varying degrees of intensity. Examples include speakers and company tours, mentors and projects, and internships or teacher externships. Policymakers are encouraged to develop programs and incentivize participation, integrate work-based learning in education curricula, and support intermediaries that develop relationships between students and employers. The brief also includes a series of case studies and best practices from employers.
www.jff.org/sites/default/files/publications/materials/Not-as-Hard-as-You-Think-042915.pdf/