

Subject Matter Expert Review

TAACCCT Grant – Round 1

Findings & Report

Grant Activity: **3.1 CIRWA - Center for Industry Research & Workforce Alignment**

Developer(s): Veronica S. Buckwalter, Director of CIRWA

Subject Matter Expert: Kevin J. Fleming, PhD.

Subject Matter Expert Credentials:

Dr. Kevin Fleming has earned two Bachelor's degrees in Philosophy and Psychology from Loyola Marymount University, a Masters of Arts degree in Educational Policy & Leadership from The Ohio State University, a MBA from the University of Redlands, GIS certification from the Environmental Systems Research Institute, and a Ph.D. in Education from Claremont Graduate University.

Dr. Fleming presently holds three roles in academe:

- 1) Dean of Instruction for Career & Technical Education at Norco College (CA) providing leadership and support to over 40 academic programs with experience managing Carl D. Perkins grant funds. In this role, Dr. Fleming supports three multimillion federal Department of Education Title V and Title III grants designed to increase student success among Hispanic, at risk, and low-income residents. He also co-leads a \$14.9 Million Department of Labor TAACCCT grant project in California in collaboration with other 2-year and 4-year institutions. Author of *Maintaining Strategic Relevance: Career & Technical Education Program Discontinuance in Community and Technical Colleges*.
- 2) CEO of Telos Educational Services (CA). He has successfully received over \$24 million dollars in grants awarded to educational institutions which have afforded him project management, grant development, and evaluation expertise. Wrote and co-created the animated video, *Success in the New Economy*.
- 3) Principal Investigator for the National Science Foundation's National Center for Supply Chain Technology Education (Washington DC). Dr. Fleming manages the research, strategic direction, operational details, and educational institution collaborations with partners in 19 states and the co-development of the national Supply Chain Automation industry certification. Co-author of the free e-textbook *Introduction to the Automated Warehouse*.

Previously, Dr. Fleming analyzed industry trends to provide economic development and customized labor market research through the Centers of Excellence for the California Community College system; the largest public educational system in the world.

Date of Review: October 2014 - April 2015

Synopsis of Findings:

Delaware Technical & Community College included in their TAACCCT grant narrative (Strategy 3, Activity 3.1, p.13) a proposed strategy to expand Delaware’s capacity to forecast labor market changes and opportunities via the creation of the Delaware Center of Excellence (DECOE), later renamed the Center for Industry Research & Workforce Alignment (CIRWA), modeled after the successful model in California.

This external, third-party evaluation consisted of a thorough analysis of all TAACCCT grant documents, the electronic toolkit, quarterly reports, job descriptions, framing documents, work samples, communications, research/data tools, templates, guides, survey methodology, and finished deliverables and reports. This review found substantial evidence that the college exceeded expectations. The CIRWA completed all products in alignment with the grant’s proposed milestones and deliverables. As a result of the mentorship and training provided by the California Centers of Excellence, CIRWA has matched their quality of research deliverables and degree of sophistication in just a few short years.

Without any concern or deficiency, the following pages provide a more detailed review of grant deliverables specifically notated on page 21 of the TAACCCT Project Narrative.

CIRWA Review of Grant Deliverables

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| 1. Plans for DECOE operation and priorities | Evidence clearly demonstrates that CIRWA is fully operational and has developed effective administrative and operational procedures. |
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| Specific Review Standard | Accomplished | Satisfactory | Not satisfactory |
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| 1.1 Mission and vision statement have been developed and are reflective of project goals and objectives. | X | | |
| 1.2 All required equipment, hardware, and software have been purchased and are fully functional | X | | |
| 1.3 CIRWA is fully staffed with 1 director, 1 part-time data analyst and 1 part-time administrative assistant | X | | |
| 1.4 CIRWA has an established process for accepting project requests and prioritizing activities | X | | |
| 1.5 CIRWA has developed a unique “brand” within the DTCC college structure to include a webpage, logo, and style guide for products. | X | | |

Comments: The CIRWA mission and vision were developed and the Center's Start Up Guide outlined the process and considerations for replicating this process. The Director, data analyst, and administrative assistant were hired under appropriately scoped job descriptions and were oriented with intentionality as documented in training agendas/schedules. Being without a data analyst for several months delayed one deliverable highlighting the importance of accelerating the hiring process for CIRWA personnel. The electronic Labor Market Data Request form effectively collects and communicates project requests from the field. Delineated coding guidelines ensure proper organization and inventory of project-specific communications and outputs. Equipment, hardware and software expenditure were reviewed and validated. CIRWA has an established process for accepting project requests and prioritizing activities evidenced through process flow charts and objective project criteria for both small and large project requests received. CIRWA's brand, logos, and guide for products have been created and will ensure brand consistency.

Opportunities for continuous process improvement include: 1) Strengthening CIRWA's brand by included the logo on all outputs including videos (e.g. What is CIRWA YouTube video). 2) Adding the Center's website url to its letterhead. 3) Posting past newsletters on the CIRWA website.

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| <p>2. Report on full replication of California COE to enable other states to use model</p> | <p>CIRWA developed a written guide that demonstrates conceptual and practical knowledge of activities required to launch a labor market research center complete with relevant guides, tools, and work samples.</p> |
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| <i>Specific Review Standard</i> | Accomplished | Satisfactory | Not satisfactory |
|--|---------------------|---------------------|-------------------------|
| <p>2.1 Process Guide provides a conceptual framework for start-up of a research center including required staffing, funding, partners, and resources</p> | <p>X</p> | | |
| <p>2.2 Electronic toolkit provides critical timelines, work samples, checklists, and other tools to assist states in creating a vision for a research center</p> | <p>X</p> | | |
| <p>2.3 Documents clearly identify contacts at the COE and CIRWA for states to reach out for further guidance and information if needed</p> | <p>X</p> | | |

Comments: The CIRWA Start-Up Guide provides sufficient organizational guidance and tactical recommendations for complete replication. This review validates that the Guide includes start-up funding considerations/recommendations, data needs, hiring the right personnel, partnerships and champions, mission and vision statements, marketing and outreach, goals, college/community engagement, lessons learned, and sustainability. In particular, the Electronic toolkit (weebly website) is an effective method for disseminating best practices, samples, and lessons learned for other regions/states looking to replace the creation

of a labor market research center. Completed reports and marketing/outreach pieces clearly identify the Center's contacts and website url.

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| <p>3. Published reports for first two labor market research studies</p> | <p>CIRWA exceeded expectations publishing 3 complete labor market studies developed in assistance with the CA COE utilizing their methodology and research strategies where appropriate</p> |
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| <i>Specific Review Standard</i> | Accomplished | Satisfactory | Not satisfactory |
|---|--------------|--------------|------------------|
| <p>3.1 CIRWA has completed and published at least 2 full-scale labor market studies that include primary research data.</p> | <p>X</p> | | |
| <p>3.2 Study content and methodology are reflective (to the extent appropriate) of CA COE strategies and methodologies</p> | <p>X</p> | | |
| <p>3.3 Published studies are well-written and easy to understand, and flow logically</p> | <p>X</p> | | |
| <p>3.4 Published studies contain clear outcomes and actionable recommendations to assist in college wide decision-making.</p> | <p>X</p> | | |

Comments:

Evidence shows three Labor Market Scans for Delaware have been completed to date: Energy Industry (Feb 2013), Engineering Technology: Mechanical, Electrical, Electromechanical, and Drafting (Feb 2014), and Engineering Technology: Civil, Surveying, Architectural, Environmental, Construction Management, and Water/Wastewater (Nov 2014). Each report summarizes the local economic factors and employment opportunities with specific LMI data, and recommendations unique to emerging curriculum/program structures and workforce readiness skills/knowledge needed.

Evidence exists that the CIRWA's methodology and approach evolved over the course of three environmental scans. For example, research objectives were tied to tool utilization, NAICS code sampling plans were defined, and NAICS codes were mapped to SOCs subsequent to the first scan. The second and third scan also included more robust interviewing sampling plans, educational capacity, and graduate counts which provided a supply/demand gap analysis. The third scan is also accompanied by an Executive Summary and Individual Occupational Briefs thus demonstrating an evolution from the CIRWA's first scan deliverable. As a result of the mentorship and training provided by the California Centers of Excellence,

CIRWA has matched their quality of research deliverables and degree of sophistication in just a few short years.

The research strategies and survey methodology strongly reflects that of the California Centers of Excellence. Initial scoping papers and need statements heavily consider industry demand and market drivers. Planning outlines include all the key elements for community college focused labor market environmental scans including operational definitions, employment frameworks, economic drivers, new technology trends, appropriate use/reference of SOC codes and third-party provided LMI data, and recommendations. The utilized Interview Template is rooted in sound qualitative, case study, and mixed-methods research design (including use of an interview log) closely mirroring, but adapted, from the California COE methodology.

The published scan reports are well written, free of errors, and are easy to understand. The flow of content mirrors the California COE model and is both logical and appropriately sequenced. The recommendations provided are clear and actionable; albeit very similar when comparing one report to another. An opportunity for improvement is to identify the unique subtleties within each scan so that each report's recommendations do not all read the same.

Substantial forethought was also evidenced in the roll-out of each environmental scan report. Dissemination strategies included power point presentations, emails, strategic talking point outlines, and printed brochures. This review also identified a wise differentiation of roll-out strategies for different segmented audiences (e.g. different presentations and talking points for internal employee groups versus external audiences).

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| <p>4. Evidence of new/revised educational programs in response to published reports</p> | <p>Evidence demonstrates that study outcomes and recommendations have positively impacted program creation and/or modification, instructional strategy and curriculum delivery, and/or increased connection with local industry leaders and employers.</p> |
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| <i>Specific Review Standard</i> | Accomplished | Satisfactory | Not satisfactory |
|---|---------------------|---------------------|-------------------------|
| 4.1 CIRWA has provided evidence of programmatic changes and/or actions resulting from the Energy Industry Landscape Study outcomes | X | | |
| 4.2 CIRWA has provided evidence of programmatic changes and/or actions resulting from the Mechanical/Electrical Engineering Technology Study outcomes | X | | |

Comments: The research provided by CIRWA has impacted the college evidenced by a new 2-year degree program for Building Automation Systems technicians that was approved by the Board of Trustees and began in fall 2014 at the Terry Campus. All evidence indicates that this new program was a direct result of the CIRWA's research. Secondly, CIRWA's GIS survey data was used as justification to develop a 2-year degree program at Delaware Tech's Stanton Campus. Additionally, the college is utilizing the findings of the CIRWA landscape study to revise engineering curriculum.

Additional evidence was provided and reviewed documenting new and strengthened community partnerships with DTCC as a result of the CIRWA including joining the National Science Foundation's B.E.S.T. (Building Efficiency for a Sustainable Tomorrow) Network, being included in NSF ATE grant applications, a partnership with the local Trane franchise, invitations for individual and joint conference presentations, and customized data requests with new community partners. The DTCC president, Dr. Mark Brainard also highlighted CIRWA in an published op-ed (Delaware News Journal, 9-28-2014) discussing how CIRWA is helping the college form relationships with industry that may not have been possible without the Center. In addition, he describes in the piece how CIRWA's data has impacted the way the college makes decisions and how they now respond to changing employer needs.

CIRWA also documented a number of programmatic changes taking place as a direct result of the outcomes of the Mechanical & Electrical Engineering Technology Labor Market Scan. These include benchmarking their programs with other institutions, sending college-wide newsletters, infusion of internships and work experience into the curriculum, and specific course modifications (e.g. SOC-103: Sustainability & Society). Documentation indicates that other programmatic impacts are also in process.

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| 5. Sustainable funding for ongoing operations | A strategy for sustained funding for CIRWA's ongoing operations has been developed. |
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| <i>Specific Review Standard</i> | Accomplished | Satisfactory | Not satisfactory |
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| 5.1 A strategy for continued funding for the Center at full capacity for the foreseeable future has been developed and implemented | X | | |

Comments:

As documented in their Start-Up Guide, CIRWA has developed a sustainability plan centered around four pillars: reliability, credibility, visibility, and sustainability. Provided actionable guidelines and questions are included to help secure the Center in future projects and budgets. The strategy was implemented when CIRWA was included in a grant application to provide services for an NSF ATE grant for DTCC's Biotechnology program (FY14 - FY17). Continuing to follow their sustainability plan in the future will undoubtedly result in additional fees-for-services in partnership with other colleges, states, grants, Workforce Investment Boards, and private foundations.

An opportunity for sustainability would be for CIRWA's to fully implement a "fee-for-service" Process whereby CIRWA could gain additional revenue by providing labor market reports and customized studies for entities outside the college utilizing a flexible fee schedule and retained-revenue model. This is aligned with the California Center of Excellence sustainability model.

Evidence indicates that continued funding for CIRWA has been guaranteed by the DTCC President and VP of Finance for the remainder of this fiscal year. After further consultation with the Vice Presidents, CIRWA will continue to receive funding through the college to add CIRWA as a permanent line item in the College's annual budget to be sustainable via state funding.

*adapted from "The ALP Start-Up Manual" (2012, June 6) Community College of Baltimore County.