MoHealthWINs Implementation:

Third-Party Evaluation of Implementation of Programs of Study and Strategies

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EXECUTIVE SUMMARY

The Trade Adjustment Assistance Community College and Career Training (TAACCCT) program was launched in 2011 by the United States Department of Labor (USDOL), in partnership with the United States Department of Education. The state of Missouri won a Round One TAACCCT Consortium grant starting October 1, 2011, at a funding level of \$19,982,296. All 13 community and technical colleges were funded to participate in the MoHealthWINs (MHW) Consortium led by the Missouri Community College Association (MCCA).

This report provides a comprehensive picture of the implementation of programs of study (POS) and strategies by the MHW Consortium. In accordance with the TAACCCT Round One program, this implementation evaluation addressed the following questions:

- 1) What and how were POS and strategies implemented from the start to the conclusion of the grant implementation period?
- 2) What POS and strategies exhibited evidence of "promising practices" that should be sustained and possibly also scaled?
- 3) What challenges emerged during the implementation of the MoHealthWINs grant, and how were they addressed?
- 4) What POS and strategies are targeted to sustain beyond the grant?

Mixed methods were used to gather implementation evaluation data, including surveys, document review, and site visits including one-on-one and focus group interviews with a wide range of stakeholder groups.

A fuller description of quantitative results will appear in the *MoHealthWINs (MHW) Impact Evaluation* report, but it is helpful to share some foundational information about the MHW Consortium. Over 4,251 unique participants were served by grant-funded POS and strategies, exceeding the performance target of 3,539 by 19%. From these participants, 2,805 completed a TAACCCT grant-funded POS, producing a program completion rate of 66%. MHW served 80 TAA participants as part of the grant, with efforts by the Missouri colleges to serve TAA recipients facilitated by negotiations of a Memorandum of Understanding (MOU) by MCCA with the state TAA office. Looking at employment, nearly 80% of the POS completers are employed as of June 2015. Disaggregating this statistic reveals a current employment rate of 85% for incumbent workers compared to a respectable 74% for dislocated workers. Thus far, 1,046 dislocated workers have gone from unemployment to employment under the MHW grant.

Major strengths of MHW Consortium are:

- Statewide reform of community college education through the MHW Consortium
- Major updating and expansion of healthcare programs of study
- Strong commitment to serving the targeted student populations of low-skilled, low-wage workers
- Positive movement on the implementation of key strategies, such as intrusive advising and stackable credentials
- Advancement of career pathways as a integrated approach to community college education and workforce development
- Data-driven approaches using student-level data to evaluate education and employment outcomes

Major Challenges of MHW Consortium are:

- Complexity of TAACCCT implementation
- Challenges of professional learning
- The double-edged sword of free tuition
- Securing and sustaining employer engagement
- Challenges of compliance versus innovation

A sampling of promising practices that are described in this report that should be given serious consideration for sustainability and scaling are:

- Jeffco's Aspiring Student Scholar Institute (Jefferson College)
- Workforce Partnerships (Metropolitan Community College)
- Intrusive Advising and Instructional Supports (Mineral Area College)
- Intrusive Advising (State Fair Community College)
- Hybrid GED Program (St. Charles Community College)
- The Portal and Adult Learning Academy (St. Louis Community College)

The report concludes with a section on recommendations, highlighting state and local strategies that may help to sustain and scale innovations started through the MHW grant. To move forward, the MHW Consortium should consider how resources can be dedicated to innovations that can spread and endure, therefore meeting an important requirement of the TAACCCT grant to build the capacity of community colleges to improve local, regional, and state economies.

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INTRODUCTION

The Trade Adjustment Assistance Community College and Career Training (TAACCCT) program was launched in 2011 by the United States Department of Labor (USDOL), in partnership with the United States Department of Education. As stated in the Round One Solicitation for Grant Applications (SGA), a primary goal of the program is to "increase attainment of degrees, certificates, and other industry-recognized credentials and better prepare the targeted population, and other beneficiaries, for high-wage, high-skill employment" (p. 5, USDOL SGA). Since issuing this SGA, USDOL has awarded an unprecedented level of funding for a single federal program to community and technical colleges throughout the country. Through nearly \$2 billion, TAACCCT has sought to raise the skill level and employability of America's citizens who have been adversely affected by the nation's Great Recession.

Through TAACCCT, the state of Missouri has received three consortium awards to provide workforce training to the citizens of Missouri, with the first consortium grant beginning October 1, 2011. The MoHealthWINs consortium grant² was funded at \$19,982,296 with the two additional TAACCCT consortium grants adding over \$30 million with successful Round Two and Round Four applications. In addition to these, four institution-level TAACCCT grants have been awarded to community and technical colleges in Missouri. These grants were awarded to Ozarks Technical Community College (OTC), which is also the lead college of the MoHealthWINs Consortium, Crowder College, Three Rivers Community College, and Missouri State University-West Plains.

The Missouri Community College Association (MCCA) has played a leadership and administrative role to all three consortium-level grants. According to the MCCA Bylaws, MCCA is "an individual and institutional membership organization, which serves the educational needs of the citizens of the state of Missouri by offering educational leadership through the state's community colleges. MCCA offers services to the state, to its member institutions, and to its individual members in educating the public about community college education, offering professional development, gathering and reporting information pertinent to community colleges, and shaping higher education policy in the state" (MCCA, 2009, p. 2). More detail on MCCA is available on its website at: mccatoday.org.³ Noting these functions, MCCA was a logical choice to offer the leadership and organizational capacity needed to coordinate TAACCCT.

This Implementation Evaluation Report

This evaluation report provides a comprehensive picture of the implementation of programs of study (POS) and strategies by the MHW Consortium. The primary focus on POS and strategies is important for the Third Party Evaluation (TPE) because of the priority of the TAACCCT grants to "build evidence about effective practice" (TAACCCT Round One SGA, 2011, p. 3). In this regard, the scope of work that was proposed and accomplished

¹ See: U.S. Department of Labor, Employment and Training Administration, Notice of Availability of Funds and Solicitation for Grant Applications for Trade Adjustment Assistance Community College and Career Training Grants Program at http://www.doleta.gov/grants/pdf/SGA-DFA-PY-10-03.pdf

² Information about the MoHealthWINs grant appears on the MCCA website at: http://mccatoday.org/mohealthwins/ and the United States Department of Labor website at: http://www.doleta.gov/taaccct/

³ The MCCA Bylaws state the four major foci areas are: a) Educating the public about the contributions made by community colleges; b) Offering professional development programs for administrators, classified employees, faculty, and trustees at member institutions, c) Collecting, interpreting, and disseminating information pertinent to community colleges; d) Shaping higher education policy in the state through the legislature, and the executive branch including the Governor's office, the Department of Higher Education (MDHE), the Coordinating Board for Higher Education (CBHE), the Department of Elementary and Secondary Education (DESE), and other related state agencies. See: ccatoday.org/wp-content/uploads/2012/04/MCCA-Constitution-and-By-Laws-revised-October-2009.pdf

by the Missouri colleges was extensive, as this report details. In accordance with the USDOL goal for TAACCCT Round One, this implementation evaluation of the MoHealthWINs Consortium addresses the following questions:

- 1) What and how were programs of study and strategies implemented from the start to the conclusion of the grant implementation period?
- 2) What programs of study and strategies exhibited evidence of "promising practices," meaning qualitative and quantitative evidence emerged to suggest these practices should be sustained and possibly also scaled?
- 3) What challenges emerged during the implementation of the MoHealthWINs grant, and how were these challenges been addressed?
- 4) What programs of study and strategies are targeted to sustain beyond the grant?

THE THIRD PARTY IMPLEMENTATION EVALUATION PROCESS

All 13 Missouri community and technical colleges in the MoHealthWINs (MHW) consortium were part of the implementation evaluation conducted by the TPE. This evaluation used a mixed-methods design that relied primarily on qualitative methods (interview, site visit, survey, etc.) to provide informative and meaningful description, supplemented with quantitative methods to triangulate and corroborate the qualitative findings. Data collection began Fall 2012 and continued through December 2014 to assess evolution of the implementation of POS and strategies from baseline in Fall 2012 to full-scale maturity in Fall 2014. Qualitative data were gathered through site visits; telephone, personal, and focus group interviews; online surveys; and email, website, and other documentation, including Quarterly Performance Reports (QPRs), Annual Performance Reports (APRs), dashboards, and numerous supplementary data reports authored by Cosgrove & Associates, the MHW Lead Researchers. Also, quantitative data representing enrollment and outcomes were gathered and analyzed by the Lead Researchers.

All grantees were asked to provide survey data to the TPE in a manner that reflected mid-point and mature implementation. All colleges conducted a self-assessment of implementation using an instrument developed by the TPE that assessed the following dimensions: 1) stakeholder roles/responsibilities and contributions to the MHW grant; 2) the level of implementation (not implemented, planned, implemented, and advanced implemented); 3) the level of importance to sustainability of strategies funded by the grant (low to high); and 4) the accomplishments, challenges, and actions to address challenges occurring under the grant.

Six colleges (Jefferson, Metropolitan, Mineral Area, State Fair, St. Charles, and St. Louis) were visited at the midpoint and the final stage of the grant to provide an in-depth description of implementation by a diverse sample of colleges. Four of these colleges (St. Charles, Jefferson, Metropolitan, and St. Louis) were also visited near the beginning of the grant, in Fall 2012, to document baseline implementation. Taken together, these six colleges represented a diversity of enrollments and geographic locations in the state. Combined, Metropolitan Community College and St. Louis Community College enrolled about one third of the state's community college enrollments, with the four other colleges having medium and smaller enrollments. These six colleges also represented urban, suburban, and rural locations with varying student demographics on race/ethnicity and income.

Table 1 shows enrollment for the 13 Missouri community and technical colleges over the period of the grant, from 2011 to 2014. The table shows overall enrollment over this four-year period declined from a total of about 114,000 in 2011 to about 100,000 in 2014. This decline in enrollment paralleled the improving economy nationally, and in the state of Missouri. Over the same four-year time period, the unemployment rate for Missouri

declined almost two percentage points, from 7.4% to 5.6% by March 2015⁴ as Missouri's economy recovered, These unemployment statistics show substantially more citizens were securing employment by 2015 than in the previous years (although a portion of the decrease in unemployment is attributable to individuals exceeding the time period of eligibility for unemployment benefits and no longer being counted in the state unemployment rate.)

Table 1. Missouri Community and Technical College Enrollments

Missouri Community and Technical Colleges	2011	2012	2013	2014
Crowder College (CC)	5,408	5,575	5,845	5,710
East Central College (ECC)	4,127	4,043	3,900	3,606
**Jefferson College (JC)	6,007	5,494	5,194	4,883
State Technical College of Missouri (STC)	1,168	1,212	1,294	1,259
**Metropolitan Community College (MCC)	21,256	20,151	19,234	18,202
*Mineral Area College (MAC)	4,035	3,775	4,508	4,632
Moberly Area Community College (MACC)	5,661	5,294	5,793	5,444
North Central Missouri College (NCMC)	1,802	1,786	1,775	1,720
Ozarks Technical Community College (OTC)	15,177	15,123	14,798	14,393
**St. Charles Community College (SCC)	8,174	7,642	7,396	7,153
**St. Louis Community College (STLCC)	29,230	26,613	24,009	21,218
*State Fair Community College (SFCC)	5,073	5,115	5,185	4,981
Three Rivers Community College (TRCC)	4,234	4,651	4,399	4,201
Subtotal	113,563	108,585	105,482	99,563

Source: Missouri Department of Higher Education (2015). Retrieved from http://dhe.mo.gov/data/.

^{*}Indicates site visits conducted at the mid-point and final stages of the grant.

^{**}Indicates site visits conducted at the beginning, mid-point, and final stages of the grant.

⁴ Unemployment statistics obtained from the Missouri Department of Labor and Industrial Relations Website at http://labor.mo.gov/data.

Figure 1 below provides a graphic representation of the state of Missouri, with the locations of all community and technical colleges within the state. The map shows the location of community and technical college districts, as well as the statewide reach of the State Technical College of Missouri.

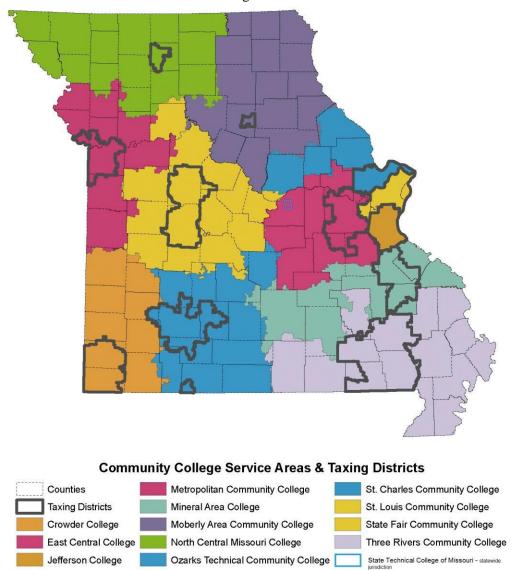


Figure 1. Map of Missouri Community and Technical Colleges

Supplementary Reports and Information

The appendices to this report provide a rich source of information that has contributed to the implementation evaluation process. For example, Appendix A provides an executive summary of *Mid-Point Implementation of MoHealthWINs* (Bragg, Flesher, & Kotamraju, 2013). This report provides evaluative evidence of implementation at the mid-point of the grant in spring/summer 2013 that is useful to compare to full-scale implementation by Fall 2014. Appendix B provides a full list of programs of study developed under the MHW grant, and the remaining appendices pertain to the third-party curriculum review that TAACCCT recipients must conduct in accordance with the grant requirements of the USDOL.

MAJOR IMPLEMENTATION RESULTS

Drawing upon all data gathered on implementation from the beginning of the grant to this time, this section summarizes major results of the MHW Consortium grant, beginning with a discussion of major strengths.

Major Strengths

MoHealthWINs Consortium Contributes to Statewide Reform

Prior to MHW, the Missouri community and technical colleges had limited experience collaborating on a statewide level. The state has a long history of its two-year colleges serving their districts in ways that are highly appreciated by their local citizens. Funding for community colleges comes from both the state and local tax base, and the local commitment is an important element that supports what the colleges are able to do. Moreover, the Missouri community and technical colleges are not technically a "system," but rather relatively autonomous postsecondary education entities operating within the state's borders. The Missouri Department of Higher Education is the coordinating board for all public colleges and universities in the state, including the community and technical colleges, and the Missouri Community College Association (MCCA), of which the 12 community colleges are part, operates as a support and advocacy body, as noted previously.

With respect to TAACCCT, the MHW Consortium grant puts forth an unprecedented obligation to align, organize, and coordinate all 13 community and technical colleges to achieve the shared goals of implementation of programs of study (POS) and strategies to put Missourians back to work and help the state's economy recover. The focus on POS, including curriculum development, and strategy implementation required by TAACCCT provides the impetus for change on a multi-college, multi-district level. Whether this would happen in 13 uniquely different ways or whether it would happen in a more coordinated fashion was part of what some considered "the grand experiment of TAACCCT." To assist with grant implementation, personnel on each college campus who were responsible for the grant –called "College Leads" – met regularly (at least once a month) via telephone conference call and in-person meetings to support grant implementation, including the very important task of ensuring DOL grant compliance. Along with the leadership of MCCA, these individuals are to be commended for providing the venue and methods for bringing disparate implementation issues together in a way that has unified and coordinated the Missouri community and technical colleges as never before. Still operating autonomously to serve the citizens of their districts, the efforts made to coordinate under TAACCCT would appear to create the potential for greater cooperation, especially noting the presence of two additional TAACCCT consortia that involve all or the majority of two-year colleges in the state.

Major Updating and Expansion of Healthcare Programs of Study

The MHW grant writing team is to be commended for recognizing significant opportunities to bring about new and revised instructional programs and delivery methods through TAACCCT. Creating a long "wish list," the grant writing team was optimistic about what could be done in the relatively short time frame of TAACCCT, noting that TAACCCT represented a rare opportunity to make needed changes statewide. Despite the condensed implementation period of Round One, the Missouri colleges directed their strategic implementation efforts to an extensive list of deliverables identified in the grant SGA, and they were largely successful in accomplishing their scope of work, as this report details.

Curriculum enhancements and modifications were made through the MHW Consortium grant. Whereas a great deal of focus on curriculum was focused on non-credit programming, credit-bearing programs of study were also funded under the MHW grant. Many POS, again primarily non-credit but also credit, were attributed with enabling low-skilled adult students who would have been unable to attend college to receive workforce-oriented training, including POS such as Certified Nursing Assistance (CNA) and Pharmacy Tech. Examples of POS that received commitments from colleges to sustain beyond the grant include Pharmacy Tech at Mineral Area College

(MAC) and Hearing Instrument Science at Ozarks Technical Community College (OTC). The OTC program represents a curriculum that has potential to scale nationally as there are only a handful of such programs in the United States, and the program's online format facilitates scale-up over a highly disbursed geographic area.

Appendix C presents summary results of the third-party curriculum review process implemented by MHW, and Appendix D presents the review instrument that was used to gather the ratings from subject-matter experts for the third-party curriculum review.

Commitment to Serving Targeted Student Populations

The MHW Consortium has demonstrated a strong commitment to serving a large number of Missouri citizens who were targeted by the TAACCCT grant. Altogether, the MHW Consortium's 13 community and technical colleges enrolled 4,251 unique participants, exceeding its performance target of 3,539 by 19%. From the total group of participants, 2,805 completed a TAACCCT grant-funded POS, producing a program completion rate of 66%. As part of the grant, MHW served 80 TAA participants. Efforts by the Missouri colleges to serve TAA recipients were facilitated by the negotiation of a Memorandum of Understanding (MOU) with the state TAA office to ensure and foster the engagement of TAA recipients.

Looking at employment, nearly 80% of the POS completers are employed currently, as of June 2015. Breaking this statistic down by incumbent versus dislocated workers enrolled in the grant, the current employment rate for incumbent workers is 85% compared to 74% for dislocated workers. The current employment rate suggests 1,046 dislocated workers went from unemployment to employment during the period of the MHW grant.

Consistently, representatives of the Missouri community and technical colleges talked about the importance of identifying and serving individuals who had been impacted by the nation's Great Recession that resulted in widespread unemployment among low-skilled Missourians. These individuals, as well as others having limited employment options, were identified as the target for TAACCCT. These participants were frequently described by practitioners associated with the grant as "students who would never be able to attend college without the TAACCCT grant." Students who had been unemployed, including long-term unemployed, TAA eligible, and underemployed were mentioned as students who were being recruited into MHW's programs. Veterans were another student population recruited to participate in the grant, and this group was recruited more stridently as the grant evolved, in accordance with directives of the USDOL. In support of recruiting a diversity of learners, all Missouri colleges negotiated MOUs with all 14 Workforce Investment Boards (WIBs) across the state to foster partnerships on behalf of serving these target student populations.

With respect to the ways in which these learners were served, numerous strategies such as non-credit course taking, hybrid (online instruction combined with classroom-based courses) instruction, and intrusive student services were implemented to serve participants in MHW's programs of study. Individuals who served in the role of intrusive student service advisors or navigators were also engaged in supporting employment and job placement services for student participants, once they completed their chosen programs of study. Due to the high employment needs of many students enrolled in this grant, employment services represented an element of the grant that increased in importance, with ongoing activity into the final year of the grant in spring and summer 2015, until the Consortium's declared end date for co-grantee college participation of June 30, 2015.

Finally, it is important to mention that, whereas the number of TAA recipients served by the grant was not large, deliberate activity was undertaken by the grant leadership at MCCA to inform the state's TAA administration and encourage their support of recruitment of TAA recipients into grant-funded programs of study.

Positive Movement on Strategy Implementation

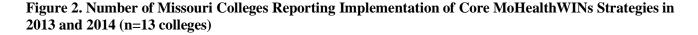
Missouri college personnel were thoughtful about identifying strategies that could potentially enhance the success of student participants in the grant. A very long list of strategies (macro and micro) is represented in the statement of work (SOW), and evident in Appendix C, where deliverables supported by the grant are listed in detail. Because the scope of work was so extensive for this grant, the Consortium designated a list of nine strategies that it considered very important to the grant. These nine strategies were identified by the grant executive advisory team near the beginning of the grant, and these strategies continue to be seen as important to the community and technical colleges in the state. As a result, this implementation evaluation report focuses on the nine strategies.

Figure 2 shows the number of Missouri colleges implementing these nine strategies as of Spring 2013 and again as of Fall 2014. These results are based on self-assessment developed by the third-party evaluator (TPE) and conducted by the College Leads (and others they solicited to provide input) at the two points in time. Results show five strategies were implemented by all or nearly all Missouri colleges by Fall 2014, and these strategies are: 1) online (hybrid) learning; 2) intrusive student supports, 3) developmental education and technical skill enhancement, 4) career pathways with stackable credentials, and 5) accelerated, chunked, or modularized courses.

Figure 2 also shows considerable growth in the number of colleges implementing three of the strategies – online (hybrid) learning, career pathways, and developmental education – between Spring 2013 and Fall 2014. Indeed, by the latter date, all or nearly all of Missouri colleges had implemented these five strategies on some level. Eight or more of the 13 colleges were implementing eight of the nine strategies by Fall 2014, leaving only non-credit to credit bridge with limited implementation activity. However, it is important to point out that the bridge concept was not a negotiated item in the SOW, but one that the College Leads added to reflect their own interest in promoting career pathways (for more discussion of career pathways, see below). Thus, whereas bridges were not required by the SOW, there was interest among practitioners affiliated with the Missouri colleges in tracking bridge program implementation in association with the MHW grant. Within this context, the results suggest a modest level of implementation, possibly because some practitioners did not understand how to implement bridges that enable low-skilled participants to transition through career pathways. Since bridges fell outside of the TAACCCT grant SOW, it did not require as much attention for the purposes of professional development or compliance.

Digging deeper into qualitative data, other innovations emerging as part of this grant have taken hold with noteworthy success. For example, an innovation called the "Portal," which was most fully developed by St. Louis Community College, has been implemented in whole or in part (mostly part) by other Missouri colleges. The Portal blends technology, instruction, and student supports to extend instruction and advising to students enrolled in non-credit programs of study, thereby supporting student retention from beginning to completion. Anecdotally, the Portal has been attributed by numerous practitioners who worked closely with this strategy with transforming the college-entry experience of low-skilled adults. Also mentioned in numerous college site reports as a strategy unique to MHW, this strategy is one that numerous colleges seek to sustain beyond the grant. Through targeted scrutiny of academic and career interest assessments, the Portal represents what many Missouri college leaders consider an innovation that has potential to make a tremendous difference to students' lives, and simultaneously improve completion outcomes and local economies.

Further, because the MHW Consortium is a founding member of the Transformative Change Initiative (TCI) Network of the Office of Community College Research and Leadership (OCCRL), MHW's Portal is featured in a strategy brief that resides on the OCCRL website's Knowledge Center for Transformative Change. This brief provides a real example of an innovation begun through TAACCCT that has been intentionally scaled to transform student, program, and institutional performance. A link to this strategy brief appears at http://occrl.illinois.edu/files/Projects/CCTCI/Reports/intrusive-student-minarea-stl.pdf.



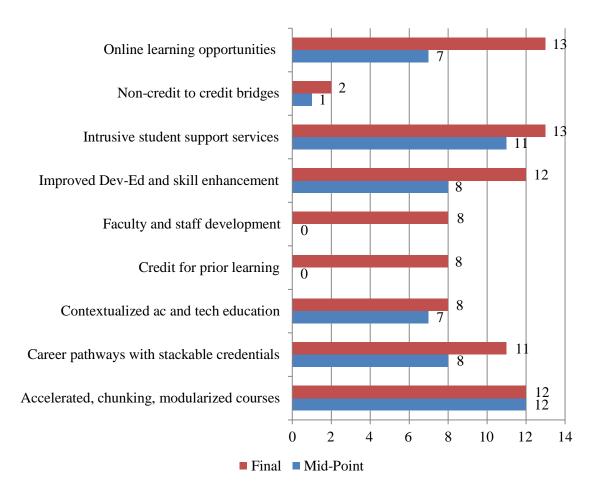
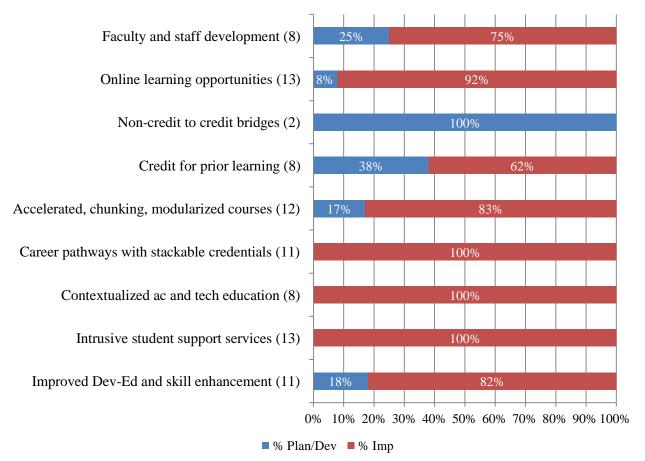


Figure 3 shows the level of implementation of the nine strategies, again reflecting the self-assessment data submitted to the TPE at the mid-point and again at the culminating point of implementation of Fall 2014. Shown in the bar chart is each strategy according to the percentage of Missouri colleges reporting planning/development versus implementation. To properly interpret this figure, it is important to know that this analysis is limited to the colleges that identified the particular strategy as part of their negotiated scope of work. If the colleges were not obligated to implement the strategy, no results are shown.

Results shown in Figure 3 corroborate the results in Figure 2 wherein strategies such as Credit for Prior Learning (CPL) and faculty and staff development were not implemented as fully as other strategies, but did show substantial growth over the period of the grant by moving from planning and development to implementation. By Fall 2014, implementation of eight of the strategies reached over half of the 13 colleges in the state. Only the strategy of non-credit to credit bridge had not progressed to the majority of the colleges by 2014 (for reasons noted above), although qualitative data suggest some college personnel had grown in their understanding of the types of bridge programs that might help to support career pathways. Only two Missouri colleges reported the bridge strategy was underway, and both reported their activity to be at the planning level.

Figure 3. Percentage of Colleges Planning/Developing Versus Implementing Core Strategies by Fall 2014 (Number of colleges identifying the strategy shown in parentheses)



Advancement of Career Pathways

Prior to TAACCCT, the Missouri colleges had relatively limited experience with career pathways, a focal point of the TAACCCT grant. To this point, the TAACCCT Round One Solicitation for Grant Applications (SGA) stated, "Community colleges work with business, labor, and government in their communities to create tailored education and training programs to meet employers' needs and give students the skills required to obtain good jobs, earn family-sustaining wages, and advance along a career pathway" (p. 3). Additionally, one of the four required strategies of TAACCCT Round One was to "build programs that meet industry needs, including developing 'career pathways'" (p. 5).

Noting that career pathways are intended to be a critical element of TAACCCT, the Missouri colleges adopted career pathways as one of a long list of strategies to be included. In accordance with the grant, many practitioners observed that they were learning about career pathways as the initiative evolved, including a sizeable number who articulated that they were learning about career pathways for first time under TAACCCT. Recognizing the incipient nature of Missouri's work with career pathways, it is noteworthy that some aspects of career pathways had begun to take hold in Missouri on a state level by the time the grant reached full maturity. Elements of career pathways that were identified as strategies under TAACCCT were also supported. For example, Credit for Prior Learning (CPL) was adopted in state policy (a link to policy adopted in 2013 appears at: http://mccatoday.org/wp-content/uploads/2014/08/Updated-Missouri-Credit-for-Prior-Learning-policy-Adopted-03.06.2013.pdf).

While implementation of CPL lags behind policy adoption, as is often the case, the fact that the College Leads worked collaboratively to move CPL to state policy exemplifies an important new effort at statewide coordination and recognition of elements of career pathways that need statewide coordination and support. Another strategy that has received statewide support is intrusive student supports, which have been adopted widely and are directly tied to the career pathways approach. A video presenting the shared goals and values of intrusive student supports utilized in the MHW grant appears at: http://mccatoday.org/mohealthwins/. Support staff, called student success coaches, retention coaches, or career advisors, who work in different Consortium colleges are featured in this video.

Evidence-Driven Approach Using Education and Employment Data

From the start of the grant, MHW adopted a comprehensive approach to data collection to measure implementation and impact. The early decision to employ an internal research group to guide and execute the data collection function supported an active and healthy commitment to using evidence to support implementation and scale innovation. On a regular basis, the Missouri colleges cooperated in gathering and supplying the internal research team with grant-related data that was translated into dashboards and other results that were shared consortium-wide. Also early in the grant, a data task force was formed to help guide the internal evaluation team on gathering and interpreting data on implementation, impact, sustainability, and continuous improvement. (The members of this group were not grant implementers, nor did they have any input into the grant proposal.) Over time, the quantity and quality of data related to the grant grew, and users became more sophisticated in their desire to know more about how the grant was proceeding.

Unprecedented under the grant and especially important to the grant's success is an agreement struck on behalf of the Missouri colleges with Cosgrove & Associates, LLC to acquire Unemployment Insurance Wage (UI Wage) data. MCCA leadership was instrumental in meeting with the Missouri Department of Workforce Development (DWD) to strike the agreement to secure these data. Under this agreement, Cosgrove & Associates developed the capacity to analyze and report results from these data on a regular basis to inform Consortium leadership and member colleges. Over the period of the MHW grant, the Consortium and colleges also received information about student enrollment in programs of study and strategy implementation on a regular (typically quarterly) basis. As the grant matured, the grantees have been able to see whether participants are becoming employed in order to monitor student outcomes and grant performance. This level of engagement with the data has enabled grantees to understand how the grant is progressing over time and to determine ways to remediate problems that emerge if grant outcomes are not matching expectations.

In addition to the data task force utilized early in the grant, a "thought partner" group was formed at the mid-point of the grant to provide additional impetus for data acquisition and translation, and to support capacity building, continuous improvement, and sustainability efforts pertaining to the grant. This group includes individuals who have shown especially strong commitment to the grant, keen curiosity about how grant-funded activities are evolving, and a most importantly, considerable interest in ensuring that efforts begun through the TAACCCT grant are sustained long term. The topic of sustainability of the MHW innovations is addressed again in the last section of this report.

Major Challenges

Complexity of TAACCCT Implementation

The complexity of the TAACCCT grant is evident in implementation on many levels. Most importantly, the Missouri colleges have experienced challenges understanding the requirements of the TAACCCT Round One program, including securing guidance from the USDOL when requirements were unclear. Without knowing with certainty what is expected and how to comply with grant requirements, the Consortium and its member colleges were sometimes slowed in responding with implementation activities. Moreover, delays in responses from

USDOL complicated initial implementation: For example, MHW experienced a six-month delay receiving initial guidance and an eight-month delay in approval of requests regarding the SOW.

Despite efforts to fulfill ambitious expectations established under TAACCCT, colleges have sometimes struggled to implement programs of study and strategies due to USDOL responses that did not seem to make sense in the context of the community college. For example, the TAACCCT employment metric disallowing counting incumbent worker wages — which may make perfect sense for workforce training programs for unemployed individuals — creates an artificial and erroneous understanding of the impact of the TAACCCT grants operating in community colleges where many low-skilled individuals pursue instruction to secure higher wage jobs. Despite these challenges, the colleges have striven to fulfill all grant obligations in accordance with the negotiated scope of work. Recent turnover of USDOL program staff has further delayed the transmission of vital information needed to close out the grant.

Challenges with Professional Learning

The changes/innovations inherent in implementation of the TAACCCT grant are significant and demanding. Through TAACCCT, multiple innovations are expected to be implemented simultaneously. Even under the best of circumstances, such a high level of change would tax any organization, let alone a cluster of organizations with limited experience working together in a high-stakes environment. Under TAACCCT, the Missouri colleges obtained a modest level of funding for professional development, consistent with what the TAACCCT SGA would allow as part of the grant (mainly annual professional conference attendance for College Leads), and while this was helpful, some practitioners were implementing changes without extensive understanding of innovations included in the grant. Regular telephone conference calls with College Leads on consortium-wide activities helped with information sharing to increase understanding, but more understanding was needed among practitioners who were making the changes. This is understandable because, at the time of grant writing, the number of personnel who would need to be trained was not fully understood, nor was the level of understanding of practitioners located in colleges throughout the state. As would be expected, some colleges had more experience with implementation of innovations than others.

Over time, college grant staff grew enormously in their understanding of what needed to be done to implement the grant-funded changes (e.g., develop new curriculum, strengthen partnerships). A combination of grant-supported professional development and trial and error helped to smooth execution of the grant. New strategies to the Missouri colleges, such as career pathways, contextualized developmental education (Dev-Ed), CPL, etc. are all strategies that may have advanced more rapidly had more strategic approaches to professional development been included in the grant, but what was offered provided critical support.

The Double-Edged Sword of Free Tuition

Missouri is to be commended for enabling MHW participants to enroll in programs of study without charging tuition. Whereas this practice has undoubtedly boosted the enrollment of low-skilled, low-income, and other underserved students, it may have complicated sustainability. Having non-credit and credit program enrollment subsidized by the grant no doubt maximized access in ways that were critical to meeting the goals of enrolling students who would otherwise not have enrolled in college; however, at the same time, this decision may complicate program of study and services sustainability. Without collecting student tuition and fees, it may be difficult to offer programs in the future. Moving non-credit courses to credit courses may solve some of the funding problem, but only if students are able to take sufficient credit hours to qualify for Pell grants.

Securing and Sustaining Employer Engagement

The interim report highlighted the importance of employer engagement in TAACCCT, but challenges that some of the co-grantee colleges experienced in securing and sustaining it. Whereas the role of employers is widely recognized as important to the MHW grant, some of the co-grantee colleges have demonstrated challenges securing consistent involvement in POS curriculum development and review, job shadowing and internship offerings, and job placement support for POS completers. The Lead Researchers for the MHW Consortium conducted a targeted project to assess employer engagement and report on the strengths and weaknesses of activities under the grant. A report focusing on these findings is available at: http://mccatoday.org/wp-content/uploads/2012/11/FINAL-Employer-Engagement-White-Paper-May-1-2015-added-disclaimer-cc-by.pdf.

Challenges of Compliance Versus Innovation

The SGA for TAACCCT emphasized "capacity building" as a primary goal of the grant, and the Missouri colleges took this requirement seriously. The extensive set of policies and procedures developed to support TAACCCT implementation across the state may be some of the most comprehensive policies associated with TAACCCT in the country. While an exemplary accomplishment, this focus on policy compliance may have come at a cost. Numerous grantees spoke with concern about how the focus on compliance had gotten in the way of serving students. For example, they saw opportunities to extend strategies to POS that were not originally targeted in the grant, but the SOW prevented them from taking these steps. The practitioners recognized that grant modification could be done, but they speculated that the opportunity to serve the students would have passed before the modification would have been approved by USDOL. What seemed clear to the TPE was that the sharp focus on compliance sometimes dampened the college's ability to sustain and spread innovations that they had hoped to achieve for their colleges through the grant. Recognizing that colleges also expressed a high level of interest in using TAACCCT to lever change, it is worrisome how grantees felt constrained by what seemed to some to be a primary focus on compliance. Strict compliance to the SOW such that new ideas were diminished or unable to be implemented created disappointment and ultimately "grant fatigue." This tension between the perceived importance of compliance and the desire to implement innovation also left some college grant staff with the feeling that they had not fully met their students' needs despite the fact that they had fully implemented the grant. This feeling may be explained, in part, by the fact that many of the College Leads had never managed a federal grant and were unfamiliar with the ways of operating under a federal grant, especially a grant as large as TAACCCT.

As mentioned previously, the last section of this report provides recommendations regarding the sustainability of programs of study and strategies associated with MHW. Opportunities to enhance sustainability are included there, along with an exercise created by the Transformative Change Initiative (TCI) to assist grantees to scale innovations created under TAACCCT.

PROMISING PRACTICES

This section provides a brief description of promising practices that have emerged in the six community colleges that were visited multiple times over the course of the grant (see Table 2). These strategies are representative of innovations that were occurring in the 13 community and technical colleges throughout the state. Individual college reports presented later in this document provide additional examples of promising strategies that have emerged through MHW.

Table 2. Promising Practices Implemented by Selected Missouri Community and Technical Colleges

Selected Missouri Colleges	Promising Practices
Jefferson College	JASSI (Jeffco's Aspiring Student Scholar Institute) – This program included two core elements: academic enrichment and college readiness with a focus on increased student confidence. Faculty and students reported large reductions in Dev-Ed requirements as a result of participation (examples included two students who each saved six semester hours and another who reduced their need by eleven credits). The short course formats with intensive advising and personal support have demonstrated proof of concept. Continued effort is needed to create an effective recruitment and integrated concept. The JASSI program could potentially be an effective GED/high school summer bridge program, a Dev-Ed dual enrollment opportunity, and/or offered during typical calendar break periods as an opportunity to quickly meet Dev-Ed requirements for students identified as requiring remediation according to college placement tests.
Metropolitan Community College	Workforce Partnerships – The partnership with the WIB matured into one of the major accomplishments associated with TAACCCT. Critical to this effort was co-locating grant staff to be physically present in three workforce/career centers. The presence of a college representative was associated with enhanced communications and greater understanding of program options. Improved workforce conditions and employment projects were noted as accomplishments by the college team. Co-location was also attributed with supporting program participants, including on-the-job (OJT) placements. The partnership was also seen by both parties (college and workforce) as essential to meeting established goals and will continue as a foundational component of the subsequent MoManWINs (MMW) consortium grant.
	Tutoring – MCC faculty identified specific gains in student success through the availability of tutoring resources, which was particularly applicable to courses that had traditionally presented a barrier to program completion and college retention (i.e., Anatomy and Physiology and Biology 101). Tutors arranged their hours to accommodate student schedules, and provided support on a range of content, from math and science to homework practice.
Mineral Area College	Grant Leadership Team – the grant leadership/management team has been built with careful attention to the needs of the grant, balanced with long-term needs of the College. Full-time college leadership who are deeply rooted in the community and who have long ties to employers have provided the infrastructure and support that was needed to build a successful team, including hiring faculty and support staff and integrating the grant into ongoing policies and processes that require attention from college personnel. This function has been handled expertly, and the TPE believes it is a model that others would benefit from following.
	Intrusive Student and Instructional Supports – Intrusive student supports were attributed with greatly improving student retention rates. MAC personnel reported completion rates of 93% for the Pharmacy Tech program, and 91% for the Maintenance program. Reasons given for such high retention rates are the fact that barriers were removed that may have prevented students from staying in the programs. Two highly qualified and competent professionals fill these student support positions, and they have contributed greatly to the success of the grant.

Selected Missouri Colleges	Promising Practices
	Acceleration, Chunking, and Modularization – The College introduced flexible schedules and modularized, chunked curriculum in 4-, 8-, and 12-week formats. Pharmacy Tech is an accelerated program. MAC has also made format changes in the Maintenance class/learning community, and Maintenance Tech curriculum.
	Online Learning – MAC developed online or hybrid versions of new courses for the Industrial Maintenance program, and the Pharmacy Tech program conducts assessments online.
State Fair Community College	Intrusive Advising – SFCC leaders consider Intrusive Advisement through the Navigator program to be very successful at increasing retention and completion. Navigators are student advocates who help students navigate their career path from application and enrollment through their education plan and on to employment. SFCC has launched the program with 13 Navigators throughout the campus system. A single Navigator is part of a Success Team that encompasses 4 to 6 programs of study.
St. Charles Community College	Hybrid GED Program – The high-tech and high-touch Hybrid GED has combined online instruction with in-person personal coaching in distributed locations. This has created a flexible program that enables students who are not able to easily travel to central sites to participate in GED courses and also benefit from individual attention and motivating coaching.
	College 101 Course – The College 101 course is an extension of the GED program, tailoring instruction for non-traditional students with enhanced college readiness content. The class is equivalent to the traditional college 101 class.
	College Partnerships for Programs – These three programs at SCC have resulted in proof of concept of shared delivery of the online programs supported by local clinical site practicums. Although there were some issues with program implementation, there have been successful completions. The approach creates expanded opportunities for students and an option to offer viable programs where local enrollments alone would not justify them.
St. Louis Community College	The Portal – Efforts to implement MHW strategies include implementation of the Portal that offers Dev-Ed and skill enhancement to students who would otherwise have limited or no access to college. The Portal consists of assessment, remedial instruction through the Adult Learning Academy (ALA), and career coaching. Working together, the faculty, "pathways coaches," and educational assistants function as a team to support students who take Portal courses and enroll in career pathways and programs of study.
	Adult Learning Academy – The ALA represents an important innovation in Dev-Ed. Associated with STLCC's MHW Portal program, ALA has seen continual improvement throughout the life of the grant. Math is a major obstacle to incoming students. ALA math represents an important accomplishment through the development of separate modules for Pre-Algebra and Elementary Algebra. The ALA Literacy component is a redesigned 12-week course that is accelerated, collapsing traditional developmental English and reading courses into a single fully integrated and contextualized course. The ALA literacy redesign was supported by STLCC, demonstrating the College's commitment to scaling and sustaining promising practices in redesigning Dev-Ed.
	Instructional Reform, Including Online – The self-paced, flexible yet structured model encouraged students to complete courses in a 5- to 8-week time frame instead of a 16-week semester format. Exceptions to this model were the Electronic Health Record (EHR) I and II programs that were designed for completion in 6 months or less. The Healthcare IT program offers a blended approach to developmental reading, with embedded co-teaching based on course materials. Several POS associated with the Informatics and Therapeutic pathways have been delivered in a compressed format. Online learning has been expanded under the MHW grant. The IT program offers a blended approach through Dev-Ed, as delivered through the Adult Learning Academy (ALA), including online modules and through the Culture of

Selected Missouri Colleges	Promising Practices
	Healthcare and Digital Literacy for Healthcare courses. Faculty and staff have worked collaboratively with other co-grantee colleges under the direction of Open Learning Initiative (OLI) and the Center for Accessibility Supportive Technology (CAST) to develop and deliver Open Educational Resources (OER) in accordance with current learning research.
	Intrusive Student and Instructional Support – Instructional and student supports are a core strategy that is accomplished primarily by grant-funded staff who bring considerable experience as client managers in Career Centers. These "pathway coaches" provided support from initial enrollment through life skills training and intervention with at-risk participants.
	Career Pathways – The notion of career pathways has advanced at St. Louis Community College, with new options and efforts to create non-credit to credit bridge courses. Programs of study associated with the Informatics pathway offer industry certifications and stacked credentials, with certification tests and degree options

These innovations are not exhaustive, but rather intended to provide insights into the kinds of changes that the colleges were making to improve programs of study and services for the low-skilled students participating in the grants.

MOHEALTHWINS CROSS-SITE RESULTS

As noted in the previous section, the MHW Consortium tackled an enormous scope of work, including the development or modification of an extensive number of healthcare programs of study. A large number of programs of study (POS) were implemented or modified under this TAACCCT grant, ranging from the addition of equipment to the modification of course materials to the development of entirely new programs of study. These programs are presented in the site visit reports included in this section, supplemented with survey results that provide a foundation for understanding the impact of the MHW grant on the target student populations. All POS impacted by the grant through new development, modification, or enhancement are listed in Appendix B.

Similar to all TAACCCT grants, MHW implementation required that many stakeholder groups (e.g., college leaders, project leaders, faculty, student support staff, students, employer partners, workforce partners, and others) be involved in the grant. The ways in which these stakeholders have been engaged in implementation varied from one college to another, but some stakeholders played similar roles in all colleges throughout the state. Table 3 provides a description of the major stakeholder groups involved in the grant, along with a summary of their roles and responsibilities, including college leaders identifying industry workforce needs and program strategies, faculty offering instruction, advising and counseling staff recruiting and providing support services, and so forth. The table presents those stakeholder group roles and responsibilities that grantees rated at the level of High, Very High, or Extremely High in at least seven of Missouri colleges.

Table 3. Stakeholder Group Roles and Responsibilities Associated with MoHealthWINs (Ratings Supplied by the Majority of Missouri Colleges)

Stakeholder Group	Implementation Roles and Responsibilities Rated at High, Very High, or Extremely High Levels
College Leaders (President, VP, Deans)	Identify industry workforce needs
Conege Leaders (Fresident, VF, Deans)	Define program strategy and goals
MoHealthWINs Project Leaders	Define program strategy and goals
Feaulty	Provide instruction
Faculty	Develop curriculum
Support Sarvices Stoff	Provide support services
Support Services Staff	Assist with outreach/recruitment efforts
Students	Enroll and engage in programs of study
Employer Partners	Provide internship/externships or other work-based learning activity
Career Center Staff	Identify and refer students

Table 3 also reveals, by their omission, that stakeholder groups like Workforce Partners and GED/Adult education providers do not have a widely adopted common role in implementation of MHW across the 13 colleges. Indeed, some colleges did identify Workforce Partners as a stakeholder group, but no roles and responsibilities were identified by more than five colleges and even then, the level of engagement did not reach the High, Very High, or Extremely High level. Several colleges mentioned only moderate implementation of the aforementioned roles and responsibilities by the identified stakeholder groups.

The stakeholder roles and responsibilities shown in Table 4 come from data gathered by surveying all 13 colleges between October and December 2014. This supplementary survey asked the grantees to identify the roles and responsibilities that stakeholder groups played and the contributions they made to the MHW grant. Overall, the colleges indicated that most stakeholder roles and responsibilities were at the Moderately High or High level by Fall 2014, although some roles and responsibilities were rated at a lower level. Shaded rows highlight stakeholder roles and responsibilities associated with higher levels of implementation by the majority of Missouri colleges.

Table 4. Comprehensive Cross-Site Ratings on Level of Engagement of Stakeholders in Key Roles and Responsibilities

Stakeholder Groups	Roles & Responsibilities	CC	ECC	JC	STCM	MCC	MAC	MACC	NCMC	OTC	STLCC	SFCC	SCC	TRCC
College Leaders	Identify industry workforce needs	High	Mod High	Low	High			Mod High				High	High	Mod High
(President, VP, Dean)	Define program strategy and goals	High	Mod High	High	High	High	High	Mod High	High	Mod High	Mod High	High	High	
	Assist with program design					High				Mod	Mod			
	Grant management						High		High					
	Assist/schedule faculty										Mod			
	Use of/Access to equipment and/or facilities	High												High
	Provide support services for students					Low								
MoHealth WINs Project	Define program strategy and goals	Mod	High		High	High	High	Mod High	Mod	Mod	High			High
Leaders	Assist with outreach/ recruitment efforts	Mod	High		High	High		Mod High						High
	Assist with program design									Mod		Low	High	
	Participate in curriculum development			Low			High		High			Low	High	
	Identify necessary skills and competencies			Low										
	Provide program funding									High				
	Identify industry workforce needs					High	High		Mod		Mod High	High	High	
	Use of/Access to equipment and/or facilities	High												High

Stakeholder Groups	Roles & Responsibilities	CC	ECC	JC	STCM	MCC	MAC	MACC	NCMC	отс	STLCC	SFCC	SCC	TRCC
Faculty	Provide internships/ externships or other work-based learning activity	Mod High	Mod High					High						High
	Develop curriculum		High	Mod	High	High	High	High	High		High			
	Assist with program design			Mod		High				High	High			
	Identify necessary skills and competencies						High		High	High		High	High	
	Identify workforce needs									High				
	Assist with outreach/ recruitment efforts											High	High	
	Connect graduates with employers									High				
	Provide instruction	High	High	High	High	High	High	High	High	High	High	High	High	High
Support Staff	Provide support services for students	High	High	High	Mod	High	High	Mod High	Mod	High	High	Mod	High	Mod
	Provide instructional materials						High		Mod Low	High				
	Maintain data reporting											High	High	
	Assist with outreach/ recruitment efforts	High	Mod High	High	High	High		Mod High		High	High			Mod
Students	Enroll/engage in Program of Study	High	High	High	High	High	High		High	High			High	Mod High
Employer Partners	Validate curriculum	Mod High		High	Mod			Mod High						Mod High
	Participate in curriculum development		Mod High											
	Provide funding			Mod Low										

Stakeholder Groups	Roles & Responsibilities	CC	ECC	JC	STCM	MCC	MAC	MACC	NCMC	отс	STLCC	SFCC	SCC	TRCC
	Identify industry workforce needs					Mod High				Low	Mod High			
	Identify necessary skills and competencies					Mod				Low	Mod			
	Provide internship/ externships or other work-based learning activity	High	High	High	High		Mod	Mod High	High			Mod High	Mod High	High
Workforce Partners	Identify industry workforce needs		Mod High											
	Assist with outreach/ recruitment efforts		Mod				High		Mod		Mod	Mod	Mod	
	Assist with design process								High					
	Toolbox								High					
	Refer students										Mod	Mod	Mod	
	Provide services	High												
Career Center	Provide support services for students	Mod	Low		Mod High		High	Mod	Mod High					High
	Assist with outreach/ recruitment of students			Low	Mod Low		High		Mod	High				
	Identify and refer students		Mod	Mod			High	Mod Low	Mod	High				High
Adult Education/	Assist with outreach/ recruitment of students											High	High	
GED	Use of/Access to equipment and/or facilities											High	High	

Notes: Mod = Moderate, Moderately.

Light blue rows designate sub-strategies where in the majority of co-grantee colleges provided self-ratings at the Moderately High to High implementation level.

Table 5 displays the variation in the level of implementation of core strategies across the Missouri colleges. Though not displayed in this table, a comparison to the 2013 MoHealthWINs Mid-point Implementation Report confirms that variation in the level of implementation diminished from mid-point implementation in 2013 to Fall 2014 when the final evaluation of implementation occurred. Since this earlier time, more colleges had reached the full or advanced level of implementation of the grant, which demonstrates progress required to fulfill grant expectations.

Specifically, intrusive student supports and online learning represent two strategies that most Missouri colleges report being at the full or advanced implementation level. Other core strategies being implemented by most Missouri colleges that have reached full implementation are strategies dealing with reformed developmental education; career pathways; and accelerated, chunked, or modularized instruction. Contextualized academic and technical education and professional development followed the abovementioned strategies in their level of implementation across the 13 Missouri colleges, and the remaining strategies were implemented less consistently at the full implementation level. The two strategies that stand out as having not reached full implementation in most colleges are Credit for Prior Learning (CPL) and non-credit to credit bridges.

The abovementioned results on variation in implementation of the nine chosen core strategies are reinforced by the grantees' ratings on the importance of sustaining and scaling TAACCCT grant-funded strategies. Results reported in Table 6 show that there is strong interest in sustaining and scaling core strategies such as intrusive student supports, online (hybrid) learning, and career pathways. Similar to results on the level of implementation, CPL and non-credit to credit bridges stand out as core strategies that are less important than other strategies to scale and sustain, partly because they had not reached full-scale implementation by the time the grant had reached Fall 2014. Some core strategies are missing the rating on the importance of sustaining or scaling the strategies because colleges that were visited were asked if the strategies should be implemented or not, with these college ratings showing "Import" for the strategies that were identified affirmatively.

These overall results on implementation of the programs of study and core strategies are important to demonstrating the vitality of the grant and its potential impact on students. Being able to characterize the level of implementation of the grant, strategy by strategy, lays the foundation for discerning the nuanced impact of the grant on student target groups.

Table 5. Implementation Ratings on MoHealthWINs Core Strategies (as of Fall 2014)

Core Strategy	CC	ECC	JC	STC	MCC	MAC	MACC	NCMC	отс	STLCC	SFCC	SCC	TRCC
Improved Dev-Ed and skill enhancement	Plan	Imp	Imp	Imp	Imp	Imp		Imp	Imp	Imp	Imp	Adv Imp	
Intrusive student support services	Imp	Imp	Imp	Imp	Imp	Imp	Imp	Imp	Adv Imp	Imp	Imp	Imp	Imp
Contextualized academic and technical education		Imp		Imp	Imp		Imp	Imp	Imp	Imp			Imp
Career pathways with stackable credentials		Imp	Adv Imp	Imp	Imp	Adv Imp	Imp	Imp		Imp	Adv Imp	Imp	Imp
Accelerated, chunking, modularized courses	Imp	Plan	Adv Imp	Imp	Imp	Adv Imp		Imp	Imp	Imp	Adv Imp	Adv Imp	Plan
Credit for prior learning		Plan	Imp	Imp	Imp	Plan	Imp	Imp		Plan			
Non-credit to credit bridges				Plan						Pre- plan			
Online (hybrid) learning opportunities	Plan	Imp	Imp	Imp	Imp	Adv Imp	Imp	Adv Imp	Adv Imp	Imp	Imp	Imp	Imp
Faculty and staff development	Adv Imp	Plan		Imp	Imp		Imp	Dev			Imp	Imp	

Notes: Pre-plan = Pre-planning; Plan = Planning; Imp = Implementation; Adv Imp = Advanced Implementation.

Light blue shaded boxes indicate strategies that were not planned.

Table 6. MoHealthWINs Core Strategies of Importance to Sustain or Scale (as of Fall 2014)

Core Strategy	CC	ECC	JC	STC	MCC	MAC	MACC	NCMC	отс	STLCC	SFCC	SCC	TRCC
Improved Dev-Ed and skill enhancement	Some Import	Very Import	Import	Ext Import	Import			Very Import	Very Import	Import		Import	
Intrusive student support services	Very Import	Very Import	Import	Very Import	Import		Very Import	Very Import	Very Import	Import	Import	Import	Ext Import
Contextualized academic and technical education		Some Import		Ext Import	Import		Very Import	Very Import	Ext Import	Import			Ext Import
Career pathways with stackable credentials		Some Import		Ext Import	Import	Import	Some Import	Ext Import		Import	Import		Very Import
Accelerated, chunking, modularized courses	Very Import	Some Import	Import	Ext Import		Import		Some Import	Very Import	Import	Import	Import	Very Import
Credit for prior learning		Some Import		Very Import			Very Import	Import					
Non-credit to credit bridges				Very Import									
Online (hybrid) learning opportunities	Some Import	Very Import		Ext Import	Import	Import	Ext Import	Ext Import	Ext Import	Import		Import	Very Import
Faculty and staff development	Ext Import	Some Import		Ext Import			Very Import	Very Import					

Notes: Import = Importance; Ext = Extreme.

Light blue shaded boxes indicate strategies that were not planned. Blank boxes are missing the rating.

SELECTED MoHealthWINs COLLEGE RESULTS

This section presents site reports for six Missouri community and technical colleges that were selected to represent the breadth and depth of implementation of the MHW grant by Fall 2014. Site visits were conducted with these six colleges in September or October 2014 to document the level of implementation of the MHW grant, according to qualitative data gathered by the TPE. These six colleges represent rural, urban, and suburban locations; they range from small to large on student enrollment metrics; and they offer a range of types of healthcare programs of study that were funded by TAACCCT. Moreover, implementation of the TAACCCT grant was determined to be on track at the mid-point of the TPE evaluation (Bragg, Flesher & Katoramraju, 2013), and these six colleges were also expected to have made progress between the mid-point and the end of the grant based on other data gathered on the grant (e.g., QPR, APR, and other supplementary documentation).

The six colleges that were visited by the TPE for the purposes of documenting implementation of MHW at the culmination of implementation of the grant are:

- Jefferson College
- Metropolitan Community College
- Mineral Area College
- State Fair Community College
- St. Charles Community College
- St. Louis Community College

Jefferson College

Key Stakeholder Roles and Responsibilities

Grant leaders and faculty and staff had engaged in recruiting, support, and curriculum development during the course of the grant. The Computer Information Systems (CIS) and Jeffco's Aspiring Student Scholar Institute (JASSI) programs were offered and the first cohort of the new Radiologic Technology (Rad Tech) program had been developed by the end of the grant period. However, the CIS program had been integrated back into the IT department and was not scheduled to continue as a cohort with a healthcare focus. Practices and curriculum developed during the grant were integrated into the standard IT program.

Career Center (WIA-funded) staff continued to be actively engaged in the grant, and the College and students benefited from the workforce staff being co-located on campus. Employers continued to provide support for clinical placements for students. Support services were also continuing within programs of study, and active dialog was occurring concerning sustaining core strategies, including transitioning staff from the grant to permanent positions funded by the College.

Table JCC-1 summarizes the TPE's assessment of the roles, responsibilities, and potential contributions of key stakeholder groups to positive impact for the MHW grant. In Fall 2014 at this site, the grant was winding down and the focus was shifting to completing commitments and integrating sustainable aspects found valuable to local stakeholders. Senior leadership at the College continued to support the programs funded by TAACCCT, and the programs were highly visible and regularly communicated to constituents who needed to know about them, including students.

Table JCC-1. Stakeholder Group Roles and Responsibilities

Stakeholder Group	Roles & Responsibilities	Contribution to MoHealthWINs
College Leaders (President,	Identify industry workforce needs	Low
VPs, Deans)	Define program strategy and goals	High
MoHealthWINs Project	Identify industry workforce needs	Low
Leaders (and project team	Participate in curriculum development	Low
members)	Identify necessary skills and competencies	Low
	Assist with program design	Moderate
Faculty teaching TAACCCT-funded POS	Participate in curriculum development	Moderate
	Provide instruction	High
Support Staff affiliated with	Provide support services for students	High
TAACCCT grant	Assist with outreach/recruitment efforts	High
Students participating in TAACCCT-funded grant	Engage in programs of study	High
	Provide program funding	Moderately Low
Employer Partners	Validate curricula	High
1 3	Provide internships/externships or other work-based learning activity	High
Career Center Partners	Assist with outreach/recruitment efforts	None
Career Center Partners	Identify, access, and/or refer participants	Moderate

Implementation of Core Strategies

Table JCC-2 presents results on implementation of the nine core strategies identified by the grantees by level of implementation and importance to sustain and scale. Grantee ratings show curriculum development including career pathways, acceleration and modularization, and online learning were rated at the implementation or sustainability levels. In the CIS and Rad Tech program, curriculum development was completed for the purpose of the grant. CPL and intrusive advising and instructional supports were also rated at the implementation level. Contextualized academic and technical education, non-credit to credit bridges, and professional development were not planned by this college as part of the TAACCCT grant.

Upon reflection, however, grantees noted that some aspects of the grant were not well matched with the student target populations and the grant structure. For example, the required prerequisites for the Rad Tech program limited completions within the grant period, and the students recruited into the CIS program who completed did not find a ready demand in healthcare IT, as reported by faculty.

Table JCC-2. Implementation of MoHealthWINs Core Strategies

Core Strategy	Implementation	Important to Sustain/Scale
Improved developmental education and skill enhancement	Implementation	Yes
A grant modification was submitted to include a college succe planned for continuation.	ess program, JASSI, which is o	currently being
Intrusive student and instructional support services (e.g. tutoring, counseling, and advising)	Implementation	Yes
Retention coach currently in place and active, efforts underwa	y to transition to permanent st	aff.
3. Contextualized academic and technical education	Not Planned	
Not a formal aspect of the project.		
4. Career pathways designed around industry-developed stackable credentials.	Advanced Implementation	
The CIS accelerated IT program is complete for the grant. It v degree program (not healthcare related). The Rad Tech program of the grant period, and it does not include stackable credential	am will complete the first degr	
5. Accelerated, chunking, modularization of courses	Advanced Implementation	Yes
The basis for the IT/CIS program is chunked curriculum and a will be retained although the healthcare-specific CIS program		elerated format
6. Credit for Prior Learning	Implementation	
A policy has been completed for Credit for Prior Learning and reduced requirements.	d some students have already b	penefited from
7. Non-credit to credit bridges	Not Planned	
Not part of grant activity.		
8. Expansion of online learning opportunities	Implementation	
Rad Tech is blended with online delivery and laboratory/clinic enhanced with online components.	cal experiences. IT programs h	nave been
9. Faculty and staff development	Not Planned	
Not part of grant activity.		

Promising Practices

The JASSI Program – This program included two core elements: academic enrichment and college readiness with a focus on increased student confidence. Faculty and students reported large reductions in Dev-Ed requirements as a result of participation (examples included two students who each saved six semester hours and another who reduced their need by eleven credits). The short course formats with intensive advising and personal support have demonstrated proof of concept. Continued effort is needed to create an effective recruitment and integrated concept. The JASSI program could potentially be an effective GED/high school summer bridge program, a Dev-Ed dual enrollment opportunity, and/or offered during typical calendar break periods as an opportunity to quickly meet Dev-Ed requirements for students identified as requiring remediation according to college placement tests.

Strengths and Weaknesses

Noteworthy strengths identified with this college's implementation of MHW follow:

- 1. Strategic planning framework and inclusion of JASSI as action item The College has a strategic planning process and the JASSI program has been included as an area for potential inclusion.
- 2. Partnership with St. Charles Community College The grant staff reported a productive relationship and potential for a continued partnership despite much more limited progress than grant staff had hoped at the outset of the grant. Specifically, in the first cohort, one student was enrolled in Rad Tech from St. Charles, and the second cohort enrolled four students.
- 3. Sustaining the acceleration completion of the A+ certification The CIS cohort program was not continued but as a result of the curriculum work, the standard program for A+ certification has been reduced from two to only one semester. Accelerated completion of this certification is now possible due to lessons learned through MHW.
- 4. Intrusive support services and coaching Coaching was recognized as one of the most valuable aspects of the program, encompassing initial advising through navigation and tutoring.

Weaknesses identified with the college's implementation of MHW included:

- 1. Sustainability of the CIS/IT program Continuation of the accelerated healthcare cohort program was not planned past the grant. Grant staff reported that the program did not appear to be a good fit for the target population or employer needs.
- 2. Total enrollment in the JASSI program The total enrollment in JASSI was slightly more than 40 participants through the grant, and only two in the last group. Renewed efforts to determine how JASSI complements Dev-Ed may be pursued and used to develop a GED/high school bridge.

Metropolitan Community College

Key Stakeholder Roles and Responsibilities

MCC conducts monthly leadership updates to review progress on the grant, and the grant management team coordinates functions, including reporting and communication. Efforts on MHW are also coordinated with Missouri's Round Two TAACCCT grant called MoManufacturingWINs (MMW) to extend the value of both grants through integration of lessons learned. The Full Employment Council continues to be a significant contributing partner to the grant, and this partnership has matured and grown stronger during the period of the grant.

Table MCC-1 summarizes the TPE's assessment of the roles, responsibilities, and potential contributions of key stakeholder groups toward implementation of the MHW grant. This table reflects the engagement and focus of the grant in Fall 2014 and does not reflect fully the shifting and refocusing that has occurred due to staff turnover. Despite these challenges, the grant has shifted from defining programs and recruiting participants to managing implementation, supporting student completion of programs, and beginning to plan for sustainability.

Table MCC-1. Stakeholder Group Roles and Responsibilities

Stakeholder Group	Roles & Responsibilities	Contribution to MoHealth WINs
College Leaders - Officers (Chancellor, Presidents)	Define program strategy and goals	High
	Define program strategy and goals	Moderate
College Leaders (VPs, Deans)	Assist with program design	Moderate
	Provide support services for students	Low
MoHealthWINs Project Leaders (and project team members)	Define program strategy and goals	High
	Assist with outreach/recruitment efforts	NA
	Identify industry workforce needs	Low
Faculty teaching TAACCCT- funded POS	Assist with program design	Low
	Participate in curriculum development	NA
14.1444	Providing instruction	High
Support Staff affiliated with	Provide support services for students	High
TAACCCT grant	Assist with outreach and recruitment efforts	High
Students participating in TAACCCT-funded grant	Other	High
F 1 D 4	Identify industry workforce needs	Moderately High
Employer Partners	Identify necessary skills and competencies	Moderate

Implementation of the Core Strategies

Table MCC-2 presents results on implementation of the core strategies, as well as results on strategies the importance of scaling. As mentioned, some initial plans were modified over the course of the grant, with some results exceeding initial expectations and some having lesser impact. In the TPE's 2013 Mid-Point Report, we noted that the Chancellor had defined the grant project as an opportunity to learn best practices for further implementation to support institutional change in the college, and while this objective was known and shared, on-the-grant implementation turned out to be more challenging than expected at the outset.

Whereas limited progress was made in operationalizing some strategies (e.g., core curriculum), progress was made in defining and generating buy-in for further development in some strategically placed program areas. For example, the Sterile Processing course was integrated with the Surgical Technician POS, and the College had conducted a Central Services Chapter that resulted in closer industry partnerships and opportunities for professional continuing education. In contrast, the healthcare IT POS and related integration of virtual labs had not realized initial goals. Faculty and staff reported a poor match between the target student population and the POS, creating complexity and costs that represented a major barrier to sustainability. Further, although different from the original plan, curriculum development of new contextualized courses is underway, including sustaining the Sterile Processing to planning for the healthcare core, which is likely to occur after the grant ends.

Other core strategies, such as embedded developmental education, intrusive student supports, accelerated and modularized curriculum, and online (hybrid) learning were all rated at the implementation level. Non-credit to credit bridges were not implemented, but was rated in the planning stage and awaiting local college policy development. Nursing Institute days and CAEL (Council for Adult and Experiential Learning) training on CPL were noted as accomplishments related to professional and staff development.

Table MCC-2. Implementation of MoHealthWINs Core Strategies

Core Strategy	Implementation	Important to Sustain/Scale
Improved developmental education and skill enhancement	Implementation	Yes, core to accelerated programming
The grant project included multiple tutoring opportunities with current efforts being made to sustain some added level of support and make course videos available.		
2. Intrusive student and instructional support services (e.g. tutoring, counseling, and advising)	Implementation	Included in ongoing grants
The intrusive support is accomplished by a combination of grant-supported staff and faculty with referrals made to college resources. Data has been enhanced with the addition of the Smartsheet program. Tutoring has also been made available. Full Employment Council partners also provide support services.		
3. Contextualized academic and technical education	Implementation	Yes, was the basis for new programs
The Sterile Processing course/program is based on state certification requirements and includes the exam. Other healthcare POS programs added (CNA, CMT, LPN) are contextualized using clinical practice and certification-based curriculum.		
Career pathways designed around industry- developed stackable credentials.	Implementation	Yes, core aspect

Core Strategy	Implementation	Important to Sustain/Scale
The healthcare pathway includes CNA, Sterile Processing, and Medical Technology. Students reported that they appreciate and are motivated by multiple certificates such as OSHA, Digital Literacy, and CPR. There are pathways to PRN (LPN) and a link to Surgical Tech in the Sterile Processing course.		
5. Accelerated, chunking, modularization of courses	Implementation	
Healthcare programs include certificates and multiple credentials (i.e., Digital Literacy certificate). Programs have increased awareness and consideration of non-credit options.		
6. Credit for Prior Learning	Implementation	
Policy review currently underway. Multiple faculty were trained at CAEL in Chicago and four advisors are completing online certification through that group.		
7. Non-credit to credit bridges	None	
There are no formal bridge courses. The intent is to use non-credit courses and programs as natural links but not to create specific bridge courses. The vision is that stackable elements and credit for prior learning will fill this need.		
8. Expansion of online learning opportunities	Implementation	Yes, as basis for limiting Dev-Ed course requirements
Tutoring is enhanced by posting videos captured in classes on the MCC online learning system; the KHIMS program is entirely online.		
9. Faculty and staff development	Implementation	
Nursing Institute days and CAEL training have been accomplished.		

Promising Practices

Workforce Partnerships – The partnership with the WIB matured into one of the major accomplishments associated with TAACCCT. Critical to this effort was co-locating grant staff to be physically present in three workforce/career centers. The presence of a college representative was associated with enhanced communications and greater understanding of program options. Improved workforce conditions and employment projects were noted as accomplishments by the college team. Co-location was also attributed with supporting program participants, including on-the-job (OJT) placements. The partnership was also seen by both parties (college and workforce) as essential to meeting established goals and will continue as a foundational component of the subsequent MMW Consortium grant.

Tutoring – MCC faculty identified specific gains in student success through the availability of tutoring resources, which was particularly applicable to courses that had traditionally presented a barrier to program completion and college retention (i.e., Anatomy and Physiology and Biology 101). Tutors arranged their hours to accommodate student schedules, and provided support on a range of content, from math and science to homework practice.

Strengths and Weaknesses

Noteworthy strengths identified with this college's implementation of MHW follow:

- 1. Partnership with the Full Employment Council (FEC) and co-location of MCC staff at the WIBs The FEC is a primary partner and a college grant-supported person is co-located onsite to assist and guide various aspects of the grant process. Co-location was extended from one to three sites over the period of the grant.
- 2. Sterile Processing course and Central Services Certificate The Sterile Processing program of study included incumbent worker cohorts selected by area hospitals> Some of these students sought Central Services certification as well, which had been integrated with the Surgical Technician program of study.
- 3. Tutoring Tutors provided individualized support in the form of additional practice for students, and help with homework and foundational skills.
- 4. Advising data management The adoption of the Smartsheet tracking system was further enhanced by a sustained effort to enhance data through adoption of the Hobson program.
- 5. Extension of stackable POS design to Industrial Technology The Industrial Technology program had adopted the stackable model to enhance this program of study.

Weaknesses include:

- 1. Data sharing with FEC Whereas the partnership had matured in important ways, the systems and needs for data sharing between the college and FEC remained inefficient. New procedures were being discussed. The WIB and support staff also needed to ensure consistency on materials and supplies.
- 2. Core healthcare curriculum Progress was made defining this curriculum but continued effort was still needed to manage the reduction of required credit hours in the program of study (current 78 hours reduced to 68 hours).
- 3. Virtualization lab The virtual lab in Healthcare IT was not successful, and the potential use of the equipment associated with the virtual lab has yet to be determined.
- 4. Low-quality rental textbooks and lack of test preparation to support program completion of the Certified Nursing Assistant (CNA) program Some students had to wait a considerable period of time (reported two months) to take certification testing without a text for reference because they had rented the texts while they were actively engaged in instruction. In addition to the wait period, students noted that the poor quality of copied materials and limited ability to add notes had added to their concerns about their ability to be successful at achieving certification.

Mineral Area College

Key Stakeholder Roles and Responsibilities

Mineral Area College (MAC) has built a strong grant team to guide MHW, including securing full-time faculty and support staff who engage in student recruitment, support services, and employment and placement. Local employers are involved in the programs of study (Pharmacy Tech and Healthcare Maintenance), both through advisory committees and working directly with students who are placed into internships or employment. The Healthcare Maintenance program offered the 200-hour maintenance program that covered basic skills, allowing students who wanted entry-level jobs to obtain the credential in three months and become employed. A designated member of the MHW staff spends 1-2 days per week at the local Career (workforce) Center recruiting individuals who seek employment services. Regularly scheduled presentations and meetings conducted at the Career Center resulted in a significant portion of the MHW student population at MAC, resulting in as many as 40-50 percent of the students in the program being recruited through the Career Center.

Table MAC-1 summarizes the TPE's assessment of the roles, responsibilities, and potential contributions of key stakeholder groups toward implementation of the MHW grant. This table reflects the engagement and focus of the grant in Fall 2014, showing a consistently high level of implementation of roles and responsibilities by the identified stakeholders. Despite these challenges, the grant has shifted from defining programs and recruiting participants to managing implementation, supporting student completion of programs, and beginning to plan for sustainability.

Table MAC-1. Stakeholder Group Roles and Responsibilities

Stakeholder Group	Roles & Responsibilities	Contribution to MoHealthWINs
College Leaders (President,	Define program strategy and goals	High
VPs, Deans)	Other (grant management)	High
MoHealthWINs Project Leaders (and project team	Identify industry workforce needs	High
	Assist with program design	High
members)	Participate in curriculum development	High
Faculty teaching TAACCCT-funded POS	Provide instruction	High
	Identify necessary skills and competencies	High
	Participate in curriculum development	High
Support Staff affiliated with	Provide support services for students	High
TAACCCT grant	Provide instructional materials	High
Students participating in TAACCCT-funded grant	Other	High
Employer Partners	Provide internships/externships or other work-based learning activity	Moderate

Implementation of Core Strategies

The WorkKeys assessments were identified as a critical element in identifying students who would not be successful in the program without some remediation. Students also accessed ACT's Key Train to enhance their skill levels. The students who needed additional supports were able to use college resources including the Learning Center. All students benefited from active support personnel who provided ongoing advisement and resources to help students succeed. Programs developed to address student needs included e-learning that reduced class time and allowed students to proceed at their own pace.

When MHW began, MAC did not have a Pharmacy Tech program and none existed in Southeast Missouri. Strong commitment was evident from pharmacies from the start of the grant, but their commitment strengthened throughout the grant. The Pharmacy Tech program included eLearning, with all quizzes and exams taken online. Online resources also provided students with a way to complete assignments outside of class time and improve their academic skills so that they would be prepared to pass the certification exam.

Career pathways with stackable credentials were evident in the Healthcare Maintenance pathway that included three stackable credentials: students could take all three related programs of study consecutively or they could sequence the programs and stack the credentials. Students also had the option of completing one program, locating employment with the option to return to MAC, and completing the other two programs at their own pace. Flexible programming was also available, as Healthcare Maintenance students did not have to wait for regular semesters to begin. The Healthcare Maintenance program leads to a career pathway starting with an entry-level certificate that can lead to the Associate of Applied Science (AAS) degree.

Table MAC-2. Implementation of MoHealthWINs Core Strategies

Core Strategy	Implementation	Important to Sustain/Scale
Improved developmental education and skill enhancement	Implementation	
Developing Portal to include assessment of academic and tech academic remediation; career exploration	nnical skills; interest inventorio	es, self-paced
2. Intrusive student and instructional support services (e.g. tutoring, counseling, and advising)	Implementation	
Highly-qualified and competent professional hired to fill the soutstanding leader for the grant.	support service role, who has p	proven to be an
3. Contextualized academic and technical education	Not Planned	
Not a formal aspect of the grant project although faculty mem development to support this more broadly.	bers have expressed an interes	st in course
4. Career pathways designed around industry-developed stackable credentials.	Advanced Implementation	Yes
Develop/introduce new certificate programs tied to industry c healthcare); Pharmacy Tech. The Pharmacy Tech is a stackab pathway to the AAS. Discussion of this possibility was under along in the creation of a stackable credential leading to the A	le credential but the college haway. The Maintenance Tech p	d not yet created rogram was further

were not far enough along to participate in AAS, the curriculum was being identified.

Core Strategy	Implementation	Important to Sustain/Scale
5. Accelerated, chunking, modularization of courses	Advanced Implementation	Yes
Introduce flexible schedules and curricular structures; modula (The Pharmacy Tech is an accelerated program, online RN is also integrating format changes into maintenance class/learnin curriculum)	same time frame, different mo	dality. MAC is
6. Credit for Prior Learning	Planning	
CPL is granted only in recognition of previous courses that fit in with new POS prerequisites or courses. New state policy will shape approaches.		
7. Non-credit to credit bridges	Not planned	
8. Expansion of online learning opportunities	Advanced Implementation	Yes
Develop online or hybrid versions of new courses or programs for industrial maintenance and pharmacy tech. Enhance training with online simulation software for maintenance technician		
9. Faculty and staff development	Not Planned	

Promising Practices

Grant Leadership Team – the grant leadership/management team has been built with careful attention to the needs of the grant, balanced with long-term needs of the college. Full-time college leadership who are deeply rooted in the community and who have long ties to employers have provided the infrastructure and support that was needed to build a successful team, including hiring faculty and support staff and integrating the grant into ongoing policies and processes that require attention from college personnel. This function has been handled expertly, and the TPE believes it is a model that others would benefit from following.

Intrusive Student and Instructional Supports – Intrusive student supports were attributed with greatly improving student retention rates. MAC personnel reported completion rates of 93% for the Pharmacy Tech program, and 91% for the Maintenance program. Reasons given for such high retention rates are the fact that barriers were removed that may have prevented students from staying in the programs. Two highly qualified and competent professionals fill these positions, and they have contributed greatly to the success of the grant.

Acceleration, Chunking, and Modularization – The College introduced flexible schedules and modularized, chunked curriculum in 4-, 8-, and 12-week formats. Pharmacy Tech is an accelerated program. MAC has also made format changes in the Maintenance class/learning community, and Maintenance Tech curriculum.

Online Learning – MAC developed online or hybrid versions of new courses for the Industrial Maintenance program, and the Pharmacy Tech program conducts assessments online.

Strengths and Weaknesses

Noteworthy strengths identified with this college's implementation of MHW follow:

- 1. Partnership with the Career Center and local employers A long history of utilizing advisory committees is evident in curriculum development and delivery. Strong working knowledge of community, business and workforce leaders supports and sustains the grant.
- 2. Documentation The grant leadership team has developed systemic processes and clear documentation to support implementation and sustainability of the MHW grant. Outstanding examples in this area are worthy of replication elsewhere.
- 3. Modeling of intrusive advising for the College support services The advising and counseling functions have been enhanced through the MHW grant, and it has provided a model for improving advising and counseling services throughout the college. Since the beginning of the grant, support services personnel have shown interest in adopting practices associated with the grant in ongoing college operations.
- 4. Faculty engagement New faculty have been hired to fulfill requirements of the grant to complement faculty with longstanding tenure appointments. These new faculty have embraced the opportunity to develop new and innovative instructional approaches, and they have brought their enthusiasm for new instructional approaches to tenure-line appointments that have followed from their hiring.

Weaknesses that require attention include:

- Sustainability planning Whereas MAC has planned strategically to roll out the TAACCCT-funded POS
 and strategies begun through MHW (and MMW), the college would benefit from undertaking additional
 steps to institutionalize and integrate programs of study and core strategies into regular college processes
 and procedures. The MoSTEMWINs (Round Four) grant offers a unique opportunity for this strategic
 planning to take place.
- 2. Sustainability of retention strategies Already well underway with integration, the highly successful student retention strategy that has been begun through MHW deserves careful documentation. Key personnel are critical to and highly instrumental to the success of this function. Doing a modified cost-benefit analysis to estimate the costs of the function under grant authority and under college authority may be helpful in determining ways to sustain this function once the grant ends.

State Fair Community College

Stakeholders Roles and Responsibilities

Efforts to institutionalize intrusive advisement at SFCC have taken center stage in the MHW grant. Another central endeavor is to help students identify a career path and successfully navigate the college experience. SFCC reports many low-skilled participants have entered the CCNA, CMT, and Phlebotomy programs and achieved success in completing credentials. These programs are all short-term, non-credit programs that provide students with immediate success in preparing to begin entry-level positions and continue their education.

Table SFCC-1 reflects the stakeholder group roles and responsibilities at mature implementation grant life cycle. The focus for the grant has shifted to implementation of grant-funded programs of study and strategies, with a concerted focus on sustainability and scale-up of some programs of study and strategies, especially student support services/intrusive advising. Similar to other MHW sites, the grant project management team coordinates functions and reports and communicates accomplishments of the grant.

Table SFCC-1. Stakeholder Group Roles and Responsibilities

Stakeholder Group	Roles & Responsibilities	Contribution to MoHealthWINs
College Leaders (President,	Identify industry workforce needs	Moderately High
VPs, Deans)	Define program strategy	Moderately High
MoHealthWINs Project	Identify industry workforce needs	High
Leaders (and project team	Identify necessary skills and competencies	High
members)	Participate in curriculum development	High
	Assist with program design	High
Faculty teaching TAACCCT-funded POS	Provide instruction	High
Tunded 1 OS	Participate in curriculum development	High
Support Staff affiliated with	Provide support services for students	High
TAACCCT grant	Assist with outreach/recruitment efforts	High
Students participating in TAACCCT-funded grant	Engage in programs of study	High
Employer Partners	Provide internships/externships or other work-based learning activity	High
	Validate curriculum	High
Career Center	Assist with outreach/recruitment efforts	Moderate
Career Center	Identify, access, and/or refer participants	Moderate

Implementation of the Core Strategies

Table SFCC-2 presents results on implementation of the core strategies identified by the grantee college, as well as strategies identified as important to scale through the grant. Areas that are of primary focus include intrusive advisement, expansion of online learning options, accelerated/modularized courses, and industry-recognized stackable credentials. There are no non-credit to credit bridge efforts and Dev-Ed strategies are currently limited to the use of WorkKeys and Key Train within the shorter course interventions. Faculty development has been implemented for online instructors using existing courses.

Table SFCC-2. Implementation of MoHealthWINs Core Strategies

Core Strategy	Implementation	Important to Sustain/Scale
Improved developmental education and skill enhancement	Implementation	
Focus is on WorkKeys modules and Key Train remediation requirements. Not a specific Dev-Ed intervention within the		ıt Dev-Ed
2. Intrusive student and instructional support services (e.g. tutoring, counseling, and advising)	Implementation	Yes
46 students enrolled at midpoint of implementation.		
3. Contextualized academic and technical education	Not Planned	
No contextualization academic courses at midpoint.		
4. Career pathways designed around industry-developed stackable credentials.	Advanced Implementation	Yes
Single courses and options (i.e., cardiac sonography) are bas and are included on transcripts. Some programs are stand-ale curriculum.		
5. Accelerated, chunking, modularization of courses	Advanced implementation	Yes
Phlebotomy course is accelerated. Mammography short courentry/exit points and CT program also has multiple entry/exit		vith multiple
6. Credit for Prior Learning	No Change	
New state policy will shape approaches for portfolio review, direction. Not a key focus of grant activity.	previous CPL policies are co	onsistent with new
7. Non-credit to credit bridges	Not Planned	
Not an element of the grant at SFCC.		
8. Expansion of online learning opportunities	Implementation	
Phlebotomy (implemented Fall of 2012) and Sonography (la	nunched August 2013) are onl	ine programs.
9. Faculty and staff development	Implementation	
Online instructors trained in 2-credit courses for use of systematic for college online faculty.	ems and online instruction. Ex	kisting requirement

Promising Practices

Intrusive Advising – SFCC leaders consider Intrusive Advisement through the Navigator program to be very successful at increasing retention and completion. Navigators are student advocates who help students navigate their career path from application and enrollment through their education plan and on to employment. SFCC has launched the program with 13 Navigators throughout the campus system. A single Navigator is part of a Success Team that encompasses 4 to 6 POS.

Strengths and Weaknesses

Noteworthy strengths identified with this college's implementation of MHW follow:

- 1. Integrating lessons learned The College has already begun to extend the lessons learned and models from the grant to other pathways and programs of study.
- 2. Scaling of intrusive advising SFCC has led the state in modeling how cost-benefit analysis can be used to gain institutional support to scale a core strategy of the MHW grant. The College has deployed an impressive commitment to scaling intrusive student advising, and this model is being supported through a pilot phase to determine the impact on student retention. Assuming results support the change, the institution plans to proceed with the new intrusive student services model as its primary means of supporting students who attend SFCC.

Weaknesses that require attention include:

- 1. Career Center engagement The career centers were involved as a partner in the grant, but have had limited hands-on involvement. Workforce partners expressed enthusiasm for what the grant was accomplishing, but there was limited understanding. Strategic planning will be needed to create a partnership that endures beyond the grant.
- 2. Post-grant sustainability CNA/CMT courses were designed as credit bearing after having been non-credit, but they were not cost competitive. Without MHW funding, these courses may not be sustainable beyond the grant.
- 3. Complete pathway integration The grant-supported/developed programs are essentially stand-alone components without integration into prior pathways. The programs have not resulted in a reduction of overlapping content, nor has the relationship between programs (i.e., CNA and Nursing, or Radiology and Sonography) been defined.

St. Charles Community College

Stakeholder Roles and Responsibilities

Support staff provided pathway information and new POS information to potential students. They also maintained reporting data and requirements. Coaching has been embraced and a new Student Success Center is planned to leverage coaching concepts. Career center staff members are aware of programs and make referrals; they are also interested in ongoing partnerships, as are community-based organizations that have supported the Hybrid GED by providing facilities and access to the Internet.

Roles, responsibilities, and potential contributions of the key stakeholder groups toward producing the positive impact proposed by the MHW grant are shown in Table SCC-1. Programs of study have been implemented and the focus is shifting to sustainability. An important program expansion had occurred with the addition of CNA, CMT, Phlebotomy, and Patient Care Technician courses and programs through a partnership with the Allied Health department. Three programs have also been implemented (Medical Laboratory Technician, Radiological Technician, and Hearing Instrument Technician) through partnerships with other Missouri community colleges via shared online classes and local clinical experiences. The Hybrid GED program was launched and a non-traditional student-focused College 101 course was developed and implemented. Partner sites for the Hybrid GED were developed for five remote locations.

Table SCC-1. Stakeholder Group Roles and Responsibilities

Stakeholder Group	Roles & Responsibilities	Contribution to MoHealthWINs
College Leaders (President,	Identify industry workforce needs	High
VPs, Deans)	Define program strategy and goals	High
MoHealthWINs Project	Identify industry workforce needs	High
Leaders (and project team	Assist with program design	Low
members)	Validate curricula	Low
	Identify necessary skills and competencies	High
Faculty teaching TAACCCT- funded POS	Assist with outreach/recruitment efforts	High
Tunded I do	Provide instruction	High
Support Staff affiliated with	Provide support services for students	Moderate
TAACCCT grant	Maintain reporting data	High
Students participating in TAACCCT-funded grant	Participate in courses/programs	High
Employer Partners	Provide internships/externships or other work-based learning activity	Moderately High
Workforce Investment Board	Assist with outreach/recruitment efforts	Moderate
(WIB) partners	Identify, access, and/or refer participants	Moderate
GED Partner Locations	Assist with outreach/recruitment efforts	
GED Farmer Locations	Use of/access to equipment and/or facilities	High

Implementation of the Core Strategies

Table SCC-2 presents results on implementation of the core strategies identified by the co-grantee college as well as strategies identified as important to scale through the TAACCCT grant. Improved Dev-Ed at the adult precollege level through the GED program is in the sustainability phase, along with accelerated programming/chunking and expanded online instruction, although the geographic outreach element may be discontinued due to lack of funding. Several strategies are in the implementation stage including intrusive advising, career pathways, and non-credit to credit bridges. Staff development was accomplished for the changes in GED policy (i.e., new testing). Credit for prior learning and contextualized education were not planned aspects of the grant project, although the College 101 program is a contextualized college readiness course for non-traditional students.

Table SCC-2. Implementation of MoHealthWINs Core Strategies

Core Strategy	Implementation	Important to Sustain/Scale
Improved developmental education and skill enhancement	Advanced Implementation	Yes (for GED program)
Core aspects of the GED program and College 101will be con Allied Health programs are ongoing although there is no curre targeted as a summer offering for university healthcare program	ent plan to maintain the accele	
2. Intrusive student and instructional support services (e.g. tutoring, counseling, and advising)	Implementation	Yes
The intrusive advising process started with grant staff sharing awareness, followed by the hiring of staff. This will likely train		
3. Contextualized academic and technical education	Not Planned	
Not a formal aspect of the grant project although the College traditional class with content focused specifically on non-traditional class with class with the content focus on the content focus on the class with the content focus on the class with the		ent to the
Career pathways designed around industry-developed stackable credentials.	Implementation	Yes
Partner in the shared POS with other colleges. College does not "own" any of the programs but provides advisement, coaching, clinicals, pre-reqs, and academic courses for the degrees. Multiple allied health programs offer components of recognized programs of study.		
5. Accelerated, chunking, modularization of courses	Advanced Implementation	Yes
GED program is chunked including the exam. Healthcare had a session of an accelerated CNA program. Enhanced employer relationships may extend site-based programs.		
6. Credit for Prior Learning	None	
CPL is granted only in recognition of previous courses that fit not a part of grant expectations.	in with new POS prerequisite	es or courses. Was
7. Non-credit to credit bridges	Implementation	
College 101 program. The inclusion of non-credit Allied Health courses may lead to credit-bearing course taking.		

Core Strategy	Implementation	Important to Sustain/Scale
8. Expansion of online learning opportunities	Implementation (GED) Implementation (HC)	Yes
GED blended online and face-to-face and new shared programs from other colleges that include online aspects and site-based/mobile labs.		
9. Faculty and staff development	Implementation	
Faculty for GED received added staff development for changes to GED requirements.		

Promising Practices

Hybrid GED Program – The high-tech and high-touch Hybrid GED has combined online instruction with inperson personal coaching in distributed locations. This has created a flexible program that enables students who are not able to easily travel to central sites to participate in GED courses and also benefit from individual attention and motivating coaching.

College 101 Course – The College 101 course is an extension of the GED program, tailoring instruction for non-traditional students with enhanced college readiness content. The class is an equivalent offering to the traditional college 101 class.

College Partnerships for Programs – The three programs have resulted in proof of concept for shared delivery of the online programs supported by local clinical site practicums. Although there were some issues with program implementation, there have been successful completions. The approach creates expanded opportunities for students and an option to offer viable programs where local enrollments alone would not justify them.

Strengths and Weaknesses

Noteworthy strengths identified with this college's implementation of MHW follow:

- 1. Integration of GED program into ABE infrastructure The Hybrid GED program is fully integrated into the infrastructure of the ongoing campus traditional program, already sharing resources such as the website and printed material. Students on campus who are likely beneficiaries of the blended approach due to scheduling challenges and/or distance are also counseled on the options available.
- 2. GED hybrid blended option A very motivating and convenient option for learners was created through the support of a face-to-face instructor, online content, and face-to-face support in multiple locations on a weekly basis with schedules rotating on a monthly cycle. Embedded metrics in the software enable the instructor to maintain awareness of individual status and intervene as needed. The instructor was also available via email and phone, and college computer support staff has also been responsive. Students receive encouragement and achieve milestones through multiple opportunities for incremental success.
- 3. Accelerated CNA program A CNA program was offered in an accelerated format targeting college students enrolled in healthcare degree programs who were home for the summer. The program was not limited just to this student group; one participant who attended was very complimentary of the approach and reported that he was able to secure employment as a CNA, enabling him to quit three part-time low-wage jobs.
- 4. Faculty and Staff support Faculty and staff are dedicated to student success and have provided extended access, guided students through multiple programs, and increased student confidence. The value of student coaching has been recognized and a new student success center is planned.

5. Improved partner relationships – The College has improved multiple relationships as a result of the grant and the expanded non-credit outreach, including relationships with community-based groups supporting the distributed GED sites, the Career Center, and employers. The inclusion of the Allied Health non-credit programs has also improved internal campus relationships.

Weaknesses identified with the College's implementation of MHW that require attention include:

- 1. Coding courses Medical coding courses had been identified as a core element of the grant. While there was great interest and previous experience with large enrollments in this area, grant participation was limited by a barrier created by grant practices (i.e., student participation required an NCRC), and congressional delay of implementing new required standards that are the basis of the course.
- 2. Partnerships for GED sustainability Currently, one faculty member supports five testing sites and funding is available for testing and online program seats. Although enhancements are easily integrated into the campus programs given the close, ongoing coordination with the College and the outreach component, this program is at risk of elimination without additional funding.
- 3. NCRC testing strategy In some cases, the NCRC was used at program entrance and in others, it was used at the end of a program. The tests are seen as having? emerging value to students and employers but currently lacking relevance in healthcare careers.

St. Louis Community College

Table STLCC-1 reflects the stakeholder group roles and responsibilities as of Fall 2014. The emphasis of the grant has shifted to implementation of grant-funded POS and strategies, with a concerted focus on sustainability and scale-up of some POS and strategies, especially student support services/intrusive advising. Similar to other MHW sites, the grant project management team coordinates functions and reports and communicates accomplishments of the grant. Because the St. Louis Community College District is the lead on the MMW grant (TAACCCT Round Two), it is positioned favorably to extend core strategies such as student services/intrusive advising to additional students.

Table STLCC-1. Stakeholder Group Roles and Responsibilities

Stakeholder Group	Roles & Responsibilities	Contribution to MoHealthWINs
College leaders (Chancellor & Presidents)	Define program strategy and goals	Moderately High
	Define program strategy and goals	Moderate
College Leaders (VPs, Deans)	Assist with program design	Moderate
	Provide/schedule faculty	Moderately High
MoHealthWINs Project	Define program strategy and goals	High
Leaders (and project team members)	Identify industry workforce needs	Moderately High
	Assist with program design	High
Faculty teaching TAACCCT- funded POS	Provide instruction	High
Tunded 1 OS	Participate in curriculum development	High
Support Staff affiliated with	Provide support services for students	High
TAACCCT grant	Assist with outreach/recruitment efforts	High
Students participating in TAACCCT-funded grant	Engage in programs of study	High
Employees Doutroom	Identify industry workforce needs	Moderately High
Employer Partners	Identify necessary skills and competencies	Moderate
Workforce Partners	Assist in outreach/recruitment strategies	Moderate
worktorce Partners	Refer potential students	Moderate

Implementation of Core Strategies

Table STLCC-2 presents results on the implementation of the core strategies identified by the grantee as well as strategies identified as important to scale. Development of curriculum associated with the Portal in terms of new contextualized courses, embedded developmental education, career pathways, intrusive advisement, acceleration and modularization, and expansion of online (hybrid) learning were rated at the implementation level. Strategies that are not as far along include bridges of non-credit and credit curricula, which is rated at the pre-planning level. Faculty and staff development based on shared lessons learned is rated at the planning level. CPL was rated at the planning stage based on the new state policy.

Table STLCC-2. Implementation of MoHealthWINs Core Strategies

Core Strategy	Implementation	Important to Sustain/Scale
Improved developmental education and skill enhancement	Implementation	Yes
The Portal consists of assessment, remedial instruction throug provide a foundation – Culture of Healthcare and Digital Lite approach to Dev-Ed reading with embedded co-teaching base	racy for Healthcare. The IT pro	
2. Intrusive student and instructional support services (e.g. tutoring, counseling, and advising)	Implementation	Yes
Intrusive support is accomplished primarily by two grant staff career center roles. These "pathway coaches" provide support training and intervention with at-risk participants. Several edu Portal students M–F, 8:30am – 5:00pm. The faculty, coaches, supporting students in the Portal courses and within pathway	from initial enrollment through acational assistants provide tute and educational assistants fun	th life skills oring support to
3. Contextualized academic and technical education	Implementation	Yes
4. Career pathways designed around industry-developed stackable credentials.	Implementation	Yes
Career pathways offer multiple options to bridge non-credit to credit. Pathways have been defined for new programs. The programs of study associated with the Informatics pathway are based on industry certifications and stack through certification tests and degree options.		
5. Accelerated, chunking, modularization of courses	Implementation	Yes
The Portal courses are fundamentally self-paced, science boot camp courses. Several programs of study associated with the Informatics and Therapeutic pathways have been compressed.		
6. Credit for Prior Learning	Planning	No change
Missouri State policy is being adopted and beginning to be formulated into institutional policy by the St. Louis Community College District.		
7. Non-credit to credit bridges	Pre-planning	
Activities are mostly in non-credit programs, with some credit-bearing "boot camp" courses in development. The pathway between non-credit and credit has not been defined.		
8. Expansion of online learning opportunities	Implementation	Yes

Core Strategy	Implementation	Important to Sustain/Scale
Informatics programs have multiple online components. Day	Ed as delivered through the A	I A includes

Informatics programs have multiple online components. Dev-Ed, as delivered through the ALA, includes online modules and the online courses, Culture of Healthcare and Digital Literacy for Healthcare. Faculty and staff are collaborating with other grantee colleges under the direction of OLI and CAST to develop and deliver OER in accordance with current learning research. Online learning was not observed as a core content delivery method outside of an Informatics course.

9.	Faculty and staff development	Not Planned	
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This was not observed as a formal component of the grant, although faculty members were being exposed to lessons learned from peers, workshops, and assignments supporting new programs.

Promising Practices

The Portal – Efforts to implement MHW strategies include implementation of the Portal that offers Dev-Ed and skill enhancement to students who would otherwise have limited or no access to college. The Portal consists of assessment, remedial instruction through the ALA, and career coaching. Working together, the faculty, "pathways coaches," and educational assistants function as a team to support students who take Portal courses and enroll in career pathways and programs of study.

Adult Learning Academy – The ALA represents an important innovation in Dev-Ed. Associated with STLCC's MHW Portal program, ALA has seen continual improvement throughout the life of the grant. math is a major obstacle to incoming students. ALA math represents an important accomplishment through the development of separate modules for Pre-Algebra and Elementary Algebra. The ALA Literacy component is a redesigned 12-week course that is accelerated, collapsing traditional developmental English and reading courses into a single fully integrated and contextualized course. The ALA literacy redesign was supported by STLCC, demonstrating the College's commitment to scaling and sustaining promising practices in redesigning Dev-Ed.

Instructional Reform, including Online – The self- paced, flexible yet structured model encouraged students to complete courses in a 5- to 8-week time frame instead of a 16-week semester format. Exceptions to this model were the EHR (Electronic Health Record) I and II programs that were designed for completion in 6 months or less. The Healthcare IT program offers a blended approach to developmental reading, with embedded co-teaching based on course materials. Several POS associated with the Informatics and Therapeutic pathways have been delivered in a compressed format. Online learning has been expanded under the MHW grant. The IT program offers a blended approach through Dev-Ed, as delivered through the ALA, including online modules and through the Culture of Healthcare and Digital Literacy for Healthcare courses. Faculty and staff have worked collaboratively with other co-grantee colleges under the direction of OLI and CAST to develop and deliver OER in accordance with current learning research.

Intrusive Student and Instructional Support – Instructional and student supports are a core strategy that is accomplished primarily by grant-funded staff who bring considerable experience as client managers in Career Centers. These "pathway coaches" provided support from initial enrollment through life skills training and intervention with at-risk participants.

Career Pathways – The notion of career pathways has advanced at St. Louis Community College, with new options and efforts to create non-credit to credit bridge courses. Programs of study associated with the Informatics pathway offer industry certifications and stacked credentials, with certification tests and degree options.

Strengths and Weaknesses

Noteworthy strengths identified with this college's implementation of MHW follow:

- 1. Executive-level leadership engagement Senior administration continued to support the MHW with their active engagement in leadership, by attending meetings, by providing suggestions and resources, and by monitoring and supporting innovations that funded by the grant.
- 2. Navigators/student support staff Coaches have provided extensive experience and engage with students at multiple points in the life-cycle of programs of study, intervene based on progress, and provide support to students on demand.
- 3. Online application and management tools The student enrollment and management process has been simplified and enhanced with the development of online support tools.
- 4. Partner engagement At the request of St. Louis Children's Hospital, the PCT curriculum was enhanced to include additional pediatric content and skills in didactic instruction. For clinical instruction, students rotated between floors in a routine that prepared them for both adult and pediatric settings. Further, BJC Health Care engaged with STLCC to learn about the Portal and the contextualized nature of the PCT training program. BJC staff expressed their confidence that these strategies would help alleviate talent gaps when hiring entrylevel PCT trainees.

Weaknesses that require attention include:

- 1. Formalized institutional learning Although there is awareness of the need to develop a process for integration, efforts need to be put in place to share lessons learned broadly and support evidence-based decision-making on a college-wide scale beyond organic effort and individual interest.
- Integration of development education and student support/advising structure Although efforts have been
 initiated to enhance Dev-Ed and student supports across the STLCC district, particularly through the Portal
 and ALA, the administrative and conceptual decentralization offer ongoing barriers to institution-wide DevEd reform.
- 3. Program scheduling flexibility Some programs of study and courses are offered during regular daytime hours only, which may limit participation by student populations who need to work. Expanding options by increasing scheduling options may lead to larger enrollments and additional ways to address the needs of the low-wage working and unemployed populations who are targeted by TAACCCT.
- 4. Sustainability The College has already begun to engage in planning to sustain programs of study and student services now that the grant is approaching conclusion; however, more needs to be done. With the awarding of two additional TAACCCT grants to the College, the extension of federal funding has delayed some initial worries about sustainability. It is important to not simply postpone hard decisions about sustainability but to engage with them now so that plans can be put into place. With new leadership in the district, it will be especially important to begin a strategic plan for sustainability soon.

Bragg & Associates, Inc.

MHW COLLEGE SURVEY RESULTS

Data on implementation was gathered from the remaining seven Missouri community or technical colleges using a survey instrument that gathered information on stakeholder roles and contributions, key strategy implementation, and successes and challenges. These survey data were gathered from the MHW College Leads between mid-November and mid-December 2014. Methods used to gather these data by the co-grantees were reported to the TPE, with many College Leads reporting seeking input from a number of key players and informants in the grant, including college administrators, support staff, and faculty. A few colleges also indicated that they used the instrument to gather input from their partners to supplement their college's sustainability plan for the grant.

The seven colleges for which survey results are reported in this section are:

- Crowder College
- East Central College
- State Technical College of Missouri
- Moberly Area Community College
- North Central Missouri College
- Ozarks Technical Community College
- Three Rivers Community College

Crowder College

For each college, survey results address:

- Stakeholder roles and responsibilities
- Core strategy implementation and importance to sustain/scale
- Accomplishments, challenges, and activities to address strategies

Table CCC-1. Stakeholder Group Roles and Responsibilities

Stakeholder Group	Roles & Responsibilities	Contribution to MoHealthWINs
	Identify industry workforce needs	High
College Leaders (President, VPs, Deans)	Define program strategy and goals	High
, ,	Use of/access equipment and/or facilities	High
	Define program strategy and goals	Moderate
MoHealthWINs Project Leaders	Assist with outreach/recruitment efforts	Moderate
Ecuacis	Use of/access to equipment and/or facilities	High
Faculty	Provide internships/externships or other work-based learning activity	Moderately High
	Provide instruction	High
Cunnout Stoff	Provide support services for students	High
Support Staff	Assist with outreach/recruitment efforts	High
Students	Engage in program of study	High
	Validate curriculum	Moderately High
Employer Partners	Provide internships/externships or other work-based learning activity	High
Workforce Partners	Other (specify)	Moderate
Comon Conton	Provide support services for students	Moderate
Career Center	Identify and refer students	Moderate

 ${\bf Table~CCC\text{-}2.~Implementation~of~MoHealthWINs~Core~Strategies}$

Core Strategy	Implementation	Important to Sustain/Scale
Improved developmental education and skill enhancement	Planning	Somewhat Important
Focus is on WorkKeys and Key Train remediation for the CNA courses without Dev-Ed requirements. Not a specific Dev-Ed intervention within the grant strategies.		
2. Intrusive student and instructional support services (e.g. tutoring, counseling, and advising)	Implementation	Very Important
Primarily provided through tutoring and a culture of awareness grant students. Also, career counseling for CNA students.	s throughout staff and faculty	working with
3. Contextualized academic and technical education	Not Planned	
The basis for the ADN and CNA programs is professional lice contextualizing academic courses.	ensure requirements. No curre	nt effort at
4. Career pathways designed around industry-developed stackable credentials.	Not Planned	
The programs are designed to be geographic extensions of existing curriculum that is based on state licensure requirements. Larger scale pathway review/modification is not part of grant effort.		
5. Accelerated, chunking, modularization of courses	Implementation	Very Important
Multiple course scheduling options are being tested as well as month ADN program.	a scheduled summer start for	an accelerated 14-
6. Credit for Prior Learning	Not Planned	
CPL is granted only in recognition of previous courses that fit state policy will shape approaches.	in with new POS prerequisite	s or courses. New
7. Non-credit to credit bridges	Not Planned	
Not core element of grant activity.		
8. Expansion of online learning opportunities	Planning	Somewhat Important
One of the Interventions courses is scheduled for hybrid model development for Summer 2013.		
9. Faculty and staff development	Advanced Implementation	Extremely Important
New faculty have been assigned mentors and provided development opportunities.		

Table CCC-3. Major Accomplishments, Challenges, and Actions Taken to Address Challenges

Ma	jor Accomplishments up to the Present Time:
1.	We expanded our nursing program to include 25 more nursing students per year.
2.	We expanded our CNA program to include 60 more students per year.
3.	We have a state-of-the-art facility with equipment that provide our students with hands-on, real world learning.
4.	We have sustainable programs in our target area.
5.	We have created new jobs in the workforce in our communities by hiring new instructors, advisors, etc.
6.	We have also created new opportunities for existing healthcare professionals to serve as adjunct (experts) to our programs. In most instances, this has provided us with a more professional staff and much more expertise.
Ma	jor Challenges and Actions up to the Present Time:
1.	Challenge: Intensive tutoring enabled student retention but did not help the students learn critical thinking skills and allow them to pass their NCLEX exams. Historically, we weeded out those students who could not make it on their own – it created a false sense of security for the students that they were unable to maintain.
	Action: We have done away with the tutoring and let attrition take its course. This will strengthen our students and provide a more skilled and ready potential employee for the workforce.
2.	Challenge: This is a new problem we are starting to see at the Mac County campus: With our portion of the grant ended, we did not encounter these specific problems but in the classes that have started since 6/30/14 we are seeing the cultural differences of the Hispanic and African ethnicity groups that are rapidly moving into our county. We are starting to see these challenges on a much more frequent basis than before the grant ended.
	Action: Our new ELI Director has much experience with both of these groups and is making great strides in working with our students. This will be a continuing and growing need in the future.

East Central College

For each college, survey results address:

- Stakeholder roles and responsibilities
- Core strategy implementation and importance to sustain/scale
- Accomplishments, challenges, and activities to address strategies

Table ECC-1. Stakeholder Group Roles and Responsibilities

Stakeholder Group	Roles & Responsibilities	Contribution to MoHealthWINs
College Leaders (President,	Define program strategy and goals	Moderately High
VPs, Deans)	Identify industry workforce needs	Moderately High
MoHealthWINs Project	Define program strategy and goals	High
Leaders (and project team members)	Assist with outreach/recruitment efforts	High
	Develop curriculum	High
Faculty teaching TAACCCT-	Provide instruction	High
funded POS	Provide internships/externships or other work-based learning activity	Moderately High
Support Staff affiliated with	Provide support services for students	High
TAACCCT grant	Assist with outreach/recruitment efforts	Moderately High
Students participating in TAACCCT-funded grant	Engage in program of study	High
	Provide internships/externships or other work-based learning activity	High
Employer Partners	Participate in curriculum development	Moderately High
	Assist with outreach/recruitment efforts	Moderately High
Workforce Investment Board	Identify industry workforce needs	Moderately High
(WIB) partners	Assist with outreach/recruitment efforts	Moderate
Career Center	Identify, access, and/or refer participants	Moderate
Career Center	Provide support services for students	Low

 ${\bf Table~ECC\text{-}2.~Implementation~of~MoHealthWINs~Core~Strategies}$

Core Strategy	Implementation	Important to Sustain/Scale
Improved developmental education and skill enhancement	Implementation	Very Important
Transitions program is the Dev-Ed focus. There is no tradition the grant-supported strategies.	nal/legacy specific Dev-Ed into	ervention within
2. Intrusive student and instructional support services (e.g. tutoring, counseling, and advising)	Implementation	Very Important
Provided by grant-funded counselor/advisor and faculty work has two options: a for-credit group and a non-credit, self-pace Learning Center and includes a completion celebration attended	ed option. The program is integ	
3. Contextualized academic and technical education	Implementation	Somewhat Important
The basis for the CNA and CMT programs are professional liparticipate in required clinical hours. Healthcare Information certification requirements. There is no grant activity designed	Management (HIM) program i	is based on RHIT
4. Career pathways designed around industry-developed stackable credentials.	Implementation	Somewhat Important
There is a stackable component within the non-credit sequence is not a larger scale pathway review/modification as part of gr		ertification). There
5. Accelerated, chunking, modularization of courses	Planning	Somewhat Important
Courses are offered on 8-week schedule when needed (when Transitions course is a 3-week intensive cohort experience w who select that option.		1.5
6. Credit for Prior Learning	Planning	Somewhat Important
Pending review of new state standards.		,
7. Non-credit to credit bridges	Not Planned	Not Important
Not core element of grant activity.		l
8. Expansion of online learning opportunities	Implementation	Very Important
HIM and Transitions include online aspects. A hybrid CNA p begun implementation of quality tools for online instruction.	program is in development. The	e college has also
9. Faculty and staff development	Planning	Somewhat Important
Online quality tools program is being extended to all online in	nstruction.	

Table ECC-3. Major Accomplishments, Challenges and Actions Taken to Address Challenges

Major Accomplishments up to the Present Time

- 1. The portal Transitions program has been successful for students throughout the life of the grant. It has proven to be a valuable resource for those participants who are unfamiliar with college or have been out of a classroom setting and need to remediate their skills. Now that Round One is coming to a close, there are discussions on how to take the lessons learned from Round One and Transitions in order to apply them to programs outside the grant. Transitions has been the most concerted effort to skillfully apply assessment, remediation, career counseling, and other necessary services in a standardized and consistent manner, especially for those entering a non-credit program.
- 2. Transitioning HIM courses from traditional classroom-based instruction to an online format. This allowed ECC to better serve those participants who may have faced barriers posed by childcare concerns, lack of suitable transportation, and conflicting work schedules. CNA and CMT programs were hybridized.
- 3. East Central actively engaged employer partners in various aspects of grant activities, from curriculum development and revision to serving as sites for clinical and being willing to interview and potentially hire program completers.

Major Challenges and Actions up to the Present Time

- 1. **Challenge:** Significant grant staff turnover since MoHealthWINs was implemented almost 100%! The grant was initiated by a previous college president and VP who left shortly after the grant was awarded. In the absence of that leadership, there was a brief struggle to fully understand grant implementation.
 - **Action:** Although turnover has continued throughout the life of the grant, grant staff continue to meet regularly at the institution level and also within the consortium. All staff are ultimately concerned with the success of the program and the participants it serves so they work collectively to achieve objectives.
- 2. **Challenge:** Because participants do not pay tuition, they suffer little consequence if they do not complete a program of study.
 - **Action:** Grant staff work with participants to ensure they have necessary skills to succeed in an academic environment. They offer remediation when necessary and actively work with the participant to detect and overcome barriers.
- 3. **Challenge:** ECC lost a clinical site due to changes in insurance liability and fear of problems arising because CMT students were taking their certification exams at a facility where they are not currently employed. Facilities felt that participants needed to know the patients and be familiar with their needs as a whole to effectively manage their care.
 - **Action:** An alternate facility offered to serve as a testing site because the instructor was a previous employee and was familiar with patients and their needs. This happened in Q11 and served as more of a stop-gap measure; the facility that offered to serve as a testing site will probably not serve long-term needs and alternatives will need to be explored post-grant, as similar situations could arise at other facilities.

State Technical College of Missouri

For each college, survey results address:

- Stakeholder roles and responsibilities
- Core strategy implementation and importance to sustain/scale
- Accomplishments, challenges, and activities to address strategies

Table STCC-1. Stakeholder Group Roles and Responsibilities

Stakeholder Group	Roles & Responsibilities	Contribution to MoHealthWINs
College Leaders (President,	Define program strategy and goals	High
VPs, Deans)	Identify industry workforce needs	High
MoHealthWINs Project	Define program strategy and goals	High
Leaders (and project team members)	Assist with outreach/recruitment efforts	High
Faculty teaching TAACCCT-	Develop curriculum	High
funded POS	Provide instruction	High
Support Staff affiliated with	Provide support services for students	Moderate
TAACCCT grant	Assist with outreach/recruitment efforts	High
Students participating in TAACCCT-funded grant	Engage in program of study	High
Employer Partners	Provide internships/externships or other work-based learning activity	High
	Validate curricula	Moderate
Workforce partners		
Career Center	Identify, access, and/or refer participants	Moderately Low
Carcer Cerrer	Provide support services for students	Moderately High

 ${\bf Table~STCC\text{-}2.~Implementation~of~MoHealthWINs~Core~Strategies}$

Core Strategy	Implementation	Important to Sustain/Scale	
Improved developmental education and skill enhancement	Implementation	Extremely important	
The Digital Literacy course has embedded elements of Dev-E modify existing Dev-Ed courses/programs.	The Digital Literacy course has embedded elements of Dev-Ed math and reading. There are no strategies to modify existing Dev-Ed courses/programs.		
2. Intrusive student and instructional support services (e.g. tutoring, counseling, and advising)	Implementation	Very Important	
Provided by grant-funded counselor/advisor and faculty work recently hired and to-date advising and counseling duties have program faculty.			
3. Contextualized academic and technical education	Implementation	Extremely Important	
The Digital Literacy course has embedded Dev-Ed with work Maintenance course includes maintenance skills and clinical course s		ction to	
4. Career pathways designed around industry-developed stackable credentials.	Implementation	Extremely Important	
There is a stackable component within the non-credit HIM sequence. There are multiple industry-recognized certifications included in the Introduction to Maintenance course (i.e., OSHA, EPA, CPR). A larger scale integration of these grant programs with existing for-credit pathways is not part of the grant strategies.			
5. Accelerated, chunking, modularization of courses	Implementation	Extremely Important	
Courses are offered on 8-week schedules except the Biomedic	al Technician that is offered in	n 16 weeks.	
6. Credit for Prior Learning	Implementation	Very Important	
Students can test out of the Digital Literacy course and modul	es of the Biomedical Technici	an course.	
7. Non-credit to credit bridges	Planning	Very Important	
The college is currently determining the most efficient and effective non-credit to credit bridges based on the success of the current non-credit programs that started January 2013.			
8. Expansion of online learning opportunities	Implementation	Extremely Important	
The Biomedical Technician course is online. Components of courses.	online testing and content are i	included in other	
9. Faculty and staff development	Implementation	Extremely Important	
Faculty has received instruction from online curriculum vendo as part of the grant.	or, attended webinars, and atte	nded conferences	

Table STCC-3. Major Accomplishments, Challenges, and Actions Taken to Address Challenges

Mai	ior Aggamplishments to the Present Time
	jor Accomplishments to the Present Time
1.	High participant enrollment.
2.	High employment percentage of those enrolled.
3.	Strong programs of study built.
4.	Strong new community/employer relationships developed.
5.	Excellent case note file system implemented.
6.	Extended training opportunities to those in need.
7.	Implementation of the WorkKeys/NCRC Certification both through the grant and at the college.
8.	Sharing a feeling of hope with a training plan that builds confidence so participants are set up for success.
9.	Strong grant-funded faculty/staff team in place.
10.	Accelerated classes taught at innovative locations. One class was taught at 5:00am; another inside the prison walls of the Tipton Correctional Center.
Maj	or Challenges and Actions up to the Present Time
1.	Challenge: TIME!
2.	Challenge: Communication with main WIB partner. Action: Efforts continue.
3.	Challenge: Referrals from Career Center.
٥.	Action: Efforts continue
4.	Challenge: Blending grant requirements with college processes.
	Actions: We have made great strides, and continue to improve. Sometimes the wheels of change turn slowly.
5.	Challenge: Data entry timelines: With a large number of participants, data entry has been a challenge with a small staff.
	Action: Efforts continue.
6.	Challenge: Not enough manpower to handle a large enrollment easily. Action: We know now to be ready for success.
7.	Challenge: A part-time grant-funded employee to work on budget issues would have been a large help.
8.	Challenge: Off-campus classes required more time and attention than expected.
	Actions: Most of the wrinkles have been ironed out, some actions just cannot be preplanned and must be dealt with on the spot.
9.	Challenge: We launched MHW a year into the grant, should have hit the ground running early. Action: We know now to be ready for success.
10.	Challenge: All components of the grant are in place and running smoothly yet we are forced to turn the lights out.
	Actions: We could serve so many more. We look forward to additional grant opportunities to serve more participants.

Moberly Area Community College

For each college, survey results address:

- Stakeholder roles and responsibilities
- Core strategy implementation and importance to sustain/scale
- Accomplishments, challenges, and activities to address strategies

Table MACC-1. Stakeholder Group Roles and Responsibilities

Stakeholder Group	Roles & Responsibilities	Contribution to MoHealthWINs
College Leaders (President,	Define program strategy and goals	Moderately High
VPs, Deans)	Identify industry workforce needs	Moderately High
MoHealthWINs Project	Define program strategy and goals	Moderately High
Leaders	Assist with outreach/recruitment efforts	Moderately High
	Provide internships/externships or other work-based learning activity	High
Faculty	Develop curriculum	High
	Provide instruction	High
Cunnout Staff	Provide support services for students	Moderately High
Support Staff	Assist with outreach/recruitment efforts	Moderately High
Students	Engage in program of study	Moderately High
Employer Partners	Provide internships/externships or other work-based learning activity	Moderately High
	Validate curricula	Moderately Low
Workforce Partners		
Consen Conten	Identify, access, and/or refer participants	Moderately Low
Career Center	Provide support services for students	Moderate

 ${\bf Table~MACC\text{-}2.~Implementation~of~MoHealthWINs~Core~Strategies}$

Core Strategy	Implementation	Important to Sustain/Scale
Improved developmental education and skill enhancement	Not Planned	
There is no Dev-Ed intervention within the grant supported st	rategies.	
2. Intrusive student and instructional support services (e.g. tutoring, counseling, and advising)	Implementation	Very Important
The existing clinical feedback process has been expanded with activities.	h progress checks and intrusiv	e advising
3. Contextualized academic and technical education	Implementation	Very Important
The basis for the Medical Laboratory Technician (MLT) prog and students participate in required clinical hours and hands-o		state requirements,
4. Career pathways designed around industry-developed stackable credentials.	Implementation	Somewhat Important
The students complete the NCRC examination. Multiple certi	fications are not part of grant	strategies.
5. Accelerated, chunking, modularization of courses	Not Planned	
The program is based on the transfer of existing instructional schedule structures for the degree.	elements to online delivery pa	ralleling existing
6. Credit for Prior Learning	Implementation	Very Important
Phlebotomy prerequisite can be granted based on experience a articulation agreement with St. Charles Community College.	and prior certification. There i	s also an
7. Non-credit to credit bridges	Not Planned	
Not core element of grant activity.		-
8. Expansion of online learning opportunities	Implementation	Extremely Important
The design of the program is a hybrid with classroom compor with recordings for flexibility and review and scheduled on-ca clinical experiences.		
9. Faculty and staff development	Implementation	Very Important
IT and MLT faculty have attended professional development a establishment of the online delivery technology/instruction.	activities/conferences related	to the

Table MACC-3. Major Accomplishments, Challenges, and Actions Taken to Address Challenges

Ma	Major Accomplishments up to the Present Time		
1.	14 graduates		
2.	Acquired new/used equipment to enhance learning lab activities		
3.	New teaching strategies to reach our students at many levels		
Ma	Major Challenges and Actions up to the Present Time		
1.	Challenge: Amount of qualified clinical space to train students		
	Action: Brought all Immunology labs in house; beginning two weeks of clinical training in our school lab for both Microbiology and Blood Bank.		

North Central Missouri College

For each college, survey results address:

- Stakeholder roles and responsibilities
- Core strategy implementation and importance to sustain/scale
- Accomplishments, challenges, and activities to address strategies

Table NCCC-1. Stakeholder Group Roles and Responsibilities

Stakeholder Group	Roles & Responsibilities	Contribution to MoHealthWINs
College Leaders (President, VPs, Deans)	Define program strategy and goals	High
	Identify industry workforce needs	Moderate
MoHealthWINs Project Leaders (and project team	Assist with program design	Moderate
members)	Participate in curriculum development	High
	Provide instruction	High
Faculty teaching TAACCCT-funded POS	Identify necessary skills and competencies	High
	Participate in curriculum development	High
Support Staff affiliated with	Provide support services for students	Moderate
TAACCCT grant	Provide instructional materials	Moderately Low
Students participating in TAACCCT-funded grant	Engage in program of study	High
Employer Partners	Provide internships/externships or other work- based learning activity	High
Workforce Partners	Assist with outreach/recruitment efforts	Moderate
	Assist with outreach/recruitment efforts	Moderate
Career Center	Identify, access, and/or refer participants	Moderate
	Provide support services for students	Moderately High

 ${\bf Table\ NCCC\hbox{--}2.\ Implementation\ of\ MoHealthWINs\ Core\ Strategies}$

Core Strategy	Implementation	Important to Sustain/Scale	
Improved developmental education and skill enhancement	Implementation	Very important	
Focus is on WorkKeys modules and the Skills Enhancement I	Program.		
2. Intrusive student and instructional support services (e.g. tutoring, counseling, and advising)	Implementation	Very Important	
Limited student enrollment at this point, services will be direct resources.	eted by grant coordinator to ex	isting campus	
3. Contextualized academic and technical education	Implementation	Very Important	
4. Career pathways designed around industry-developed stackable credentials.	Implementation	Extremely Important	
The Pharmacy Tech is a stackable credential inside AAS. The structure. Larger scale pathway review/modification is not particularly.		n existing pathway	
5. Accelerated, chunking, modularization of courses	Implementation	Extremely Important	
The Pharmacy Tech is an accelerated program; online RN is o	on same time frame but differe	nt modality.	
6. Credit for Prior Learning	Implementation	Somewhat Important	
CPL is granted only in recognition of previous courses that fit in with new POS prerequisites or courses. New State policy will shape approaches.			
7. Non-credit to credit bridges	Not Planned		
Not core element of grant activity.			
8. Expansion of online learning opportunities	Advanced Implementation	Extremely Important	
Pharmacy Tech and RN programs are extensions of online effinivestments.	Forts and a major focus for gran	nt activities and	
9. Faculty and staff development	Development	Very Important	
Not core element of grant activity when the application was written, but it became an element of grant activities, see the comments section.			

Table NCCC-3. Major Accomplishments, Challenges, and Actions Taken to Address Challenges

Majo	or Accomplishments up to the Present Time:
1.	NCMC spent grant funds to develop a non-credit Skills Enrichment Program designed to build college-ready skills in non-traditional students and teach 1) career-ready skills not taught in traditional courses such as time management, work styles, and team building, and 2) job search skills such as how to write a resume and how to prepare for a job interview.
2.	Grant funds were spent to develop an online/hybrid Associate Degree in Nursing Program.
3.	Grant funds were spent to resurrect a Pharmacy Technician Certificate Program and to modify it into an accelerated one-semester, core-curriculum program that, if the student chooses, is stackable with an existing Associate Applied Sciences degree in Pharmacy Technology.
4.	Grant funds were spent to contract with Edmentum for the online Plato learning system, which was used to assess students' skills in reading, writing and math. Edmentum also provided online, self-paced remediation to build those skills to college levels.
5.	Grant funds were spent to pilot Tegrity, a cloud-based service that can be used to provide online curriculum delivery and augment classroom curriculum delivery. Instructors use Tegrity to record and upload lectures, which students can view multiple times. Keywords and phrases in the lectures can be bookmarked and searched online when students are reviewing for an exam, for example. Tegirty also has a "chat" feature in which students and instructors can be online at a designated time to interact with each other – ask questions, comment, and so forth, via the Internet. Students can record assignments using Tegrity – this feature was used to self-proctor exams.
6.	Grant funds were spent on the Quality Matters program to train nursing faculty in the development and delivery of online curriculum.
7.	A statewide umbrella policy for awarding credit for prior learning was developed by a work group formed and funded by the MHW grant. NCMC staff and leadership used this policy as a model to update and expand the College's existing policy on awarding credit for prior learning.
8.	Participation in the TAACCCT grant prompted NCMC staff to "think outside the box" about why and how it delivers services to future and current students. The NCMC grant team discussed challenges, changes, and improvements to policies and procedures of numerous student services, including registration, advising, financial aid, modular course blocking, entry and exit points, and assessment and delivery of Dev-Ed services. Grant participation got the conversation started and offered opportunities to try new services and/or delivery methods.
9.	Intrusive advising was provided to grant participants. This included one-on-one service delivery, as well as group and one-on-one tutoring services. We learned that intrusive advising is important to the success of many non-traditional students, especially older, first-generation students who went from high school to work without thinking that college was an option.
10.	The TAACCCT grant enabled NCMC to provide an educational opportunity to people it never would have reached: those unable (for a variety of reasons) to commute to campus for on-site classes; incumbent and dislocated workers who never thought they would have the opportunity to attend college; and those who needed personal, one-on-one advising to help them through the college experience.

Major Challenges and Actions up to the Present Time:

1. **Challenge:** Development and implementation of the Skills Enrichment Program was challenging on numerous fronts, from developing curriculum, to finding an online assessment and remediation tool, to recruiting students to use Skills Enrichment as a way to accelerate through Dev-Ed courses. Yet another challenge was finding a way to enroll students in Skills Enrichment and allow them access to its delivery via the College's Blackboard platform before they were accepted as NCMC students and enrolled in forcredit courses.

Action: Curriculum was developed after talking to students, faculty, and employers about the college-and career-ready skills needed. We bid and tested several vendors before selecting Edmentum to provide the Plato system for online assessment and remediation in reading, writing and math. Round One grant participants who were not official NCMC students were manually enrolled in Skills Enrichment and given limited access to Blackboard and the College's email service for communication with the instructor. Recruitment of students continues to be a challenge – some future and current students think they already possess adequate college- and career-ready skills; others discount Skills Enrichment because it is a non-credit course. The Skills Enrichment Program will be discussed by college staff, and broadened and molded to serve student needs in Round Four of the TAACCCT grant.

2. **Challenge:** Intrusive advising helps non-traditional students succeed in college. However, intrusive advising is time-consuming and draining for the faculty member or college staff member(s) providing this service. It is also expensive for the College because of the low faculty (or advisor) to student ratio. Will increased student retention pay for most, if not all, of the cost of intrusive advising? We do not know the answer to that question.

Action: NCMC is still addressing this challenge of how to scale up intrusive advising to increase student retention without busting the budget.

3. **Challenge:** A goal of the TAACCCT grant was to provide multiple entry and exit points to students – to offer courses with start and end dates other than the traditional fall, spring, and summer semesters. The NCMC grant team spent a great deal of time discussing this goal and how it could offer courses at non-traditional times. While we all agreed this would benefit current and future students, implementation continues to be a challenge that crosses many lines and jurisdictions. For example, NCMC can offer a course at a non-traditional time, but students may have difficulty getting federal funding for a class that begins in November instead of August.

Action: Members of the NCMC grant team included staff from many areas of the campus – IT, financial aid, the registrar's office, the business office, and so forth. These diverse people openly discussed obstacles and how current policies and procedures could be stretched or modified. We did what we could locally and offered one session of the Pharmacy Technician Certificate program with a non-traditional start and stop dates. Continuing that pattern, however, was problematic, mainly because of federal financial aid requirements regarding credit hours crossing semesters and disbursement dates of federal student loans, as well as WIA and Dislocated Workers and TAA funding.

4. **Challenge:** The TAACCCT grant challenged NCMC staff to think outside of their particular "silos" and consider how and why we serve students. Who is better served by our current policies and procedures – students or college staff? Should policies and procedures be changed? Will the change better serve students? If change is needed, what is stopping NCMC from modifying or implementing a new policy and procedure? Can the change be sustained after the end of the grant?

Action: The TAACCCT grant opened the door for discussion of current policies and procedures. The wheels of change turn slowly, but they do not turn at all until we have a reason to turn them. The grant provided a reason for at least talking about turning the wheels

Major Challenges and Actions up to the Present Time:

- 5. **Challenge:** Sustainability of programs is a challenge after grant funds are expended. Will NCMC sustain Skills Enrichment, the Pharmacy Technician Certificate Program, the online Associate Degree in Nursing Program, and intrusive advising beyond the life of the grant?
 - Action: NCMC plans to continue development, implementation, and scaling of Skills Enrichment with Round Four TAACCCT grant funds. The one-semester Pharmacy Technician program will be offered as long as there is student demand for it, although we do have concerns of saturating the labor market in northwest Missouri. The State Board of Nursing has granted NCMC a third year, 2015-2016, for piloting the online/hybrid Associate Degree in Nursing Program and staff is writing a proposal to the state board for permanent status of the online ADN program. The sustainability of intrusive advising is being discussed. We know it works, but what is the cost of sustaining it?
- 6. **Challenge:** Time was a major challenge in implementing this grant time to develop and launch programs of study; time to recruit and train faculty and grant staff; time to discuss, develop, and implement innovations; time to recruit and intrusively advise students; time to gather data; time to plan sustainability of programs and innovations; time to ..

Action: NCMC's grant staff, grant team, and administration met these time challenges by being persistent in pursuing strategies and practices to best serve grant participants. We did not give up. If plan A did not work, we followed plan B, plan C, and so forth.

Ozarks Technical Community College

For each college, survey results address:

- Stakeholder roles and responsibilities
- Core strategy implementation and importance to sustain/scale
- Accomplishments, challenges, and activities to address strategies

Table OTC-1. Stakeholder Group Roles and Responsibilities

Stakeholder Group	Roles & Responsibilities	Contribution to MoHealthWINs
College Leaders (President,	Assist with program design	Low
VPs, Deans)	Define program strategy and goals	Moderate
Define program strategy and goals		Moderate
MoHealthWINs Project Leaders	Assist with program design	Low
	Provide program funding	High
	Assist with program design	High
	Provide instruction	High
Faculty	Participate in curriculum development	High
	Identify workforce needs	High
	Connect graduates with employers	High
	Provide support services for students	High
Support Staff	Assist with outreach/recruitment efforts	High
	Identify, access, and/or refer participants	High
Students	Engage in program of study	High
	Identify industry workforce needs	Low
Employer Partners	Identify necessary workforce skills and competencies	Low
Workforce Partners		
	Assist with outreach/recruitment efforts	High
Career Center	Identify, access, and/or refer participants	High

 ${\bf Table~OTC\text{-}2.~Implementation~of~MoHealthWINs~Core~Strategies}$

Core Strategy	Implementation	Important to Sustain/Scale			
Improved developmental education and skill enhancement	Not Planned				
Dev-Ed is not an aspect of grant activity, but the Building and Maintenance (B & M) program and, to a lesser extent, the Hearing Instrument Science (HIS) program do focus on skill enhancement.					
2. Intrusive student and instructional support services (e.g. tutoring, counseling, and advising)	Advanced Implementation	Extremely Important			
Retention/Recruiter support specialist acts as the centralized human clearinghouse for all student support related issues.					
3. Contextualized academic and technical education	Implementation	Very Important			
Contextualized technical education and academic education is not part of grant activity.					
Career pathways designed around industry-developed stackable credentials.	Not Planned				
No planned as part of grant activity.					
5. Accelerated, chunking, modularization of courses	Implementation				
The HIS course has been modularized to an 8-week course structure, reducing time to degree. The 8-week B & M program focused on low-skilled individuals seeking entry into postsecondary education.					
6. Credit for Prior Learning	Not Planned				
Not a component of grant activities.					
7. Non-credit to credit bridges	Not Planned				
Not core element of grant activity.					
8. Expansion of online learning opportunities	Advanced Implementation	Extremely important			
HIS program has developed a mobile lab with state-of-the-art technology that is now being shared formally (through an MOU) with another college in the consortium.					
9. Faculty and staff development	Not Planned				

Table OTC-3. Major Accomplishments, Challenges, and Actions Taken to Address Challenges

Major Accomplishments up to the Present Time					
1.	Success as college credit students				
2.	Recognition by students that they need more education and skills				
3.	Industry satisfaction with outcomes				
4.	Restructuring to have applications completed early so interviews could occur before the program ended				
5.	Student success rates are very favorable for licensure and employment				
6.	Simulation instruction incorporated into the curriculum				
7.	95% pass rate for first-time testing for state licensure				
8.	Student satisfaction overall with the program				
9.	Implementing a mobile hearing lab was successful for out-of-the-area instruction				
Maj	Major Challenges and Actions up to the Present Time:				
1.	Challenge: The Affordable Care Act and use of adjunct teachers				
	Actions: Worked with finance office to determine appropriate class size threshold. Used a different instructor when threshold was met.				
2.	Challenge: Felons are limited in areas in which they can work within healthcare.				
	Actions: Employers provided guidance.				
3.	Challenge: Lack of acceptable clinical sites for students				
	Actions: College simulation lab utilized with excellent results				
4.	Challenge: Lack of resources and assistance to reach students outside of the Springfield area				
	Actions: Out-of-the-area recruiting activities implemented October 2014 were successful				

Three Rivers Community College

For each college, survey results address:

- Stakeholder roles and responsibilities
- Core strategy implementation and importance to sustain/scale
- Accomplishments, challenges, and activities to address strategies

Table TRCC-1. Stakeholder Group Roles and Responsibilities

Stakeholder Group	Roles & Responsibilities	Contribution to MoHealthWINs
	Identify industry workforce needs	Moderately High
College Leaders (President, VPs, Deans)	Define program strategy and goals	UK
, , , , ,	Use of/access equipment and/or facilities	High
	Define program strategy and goals	High
MoHealthWINs Project Leaders	Assist with outreach/recruitment efforts	High
	Use of/access to equipment and/or facilities	High
Faculty	Provide internships/externships or other work- based learning activity	High
,	Provide instruction	High
Support Staff	Provide support services for students	Moderate
Students	Assist with outreach/recruitment efforts	Moderate
Students	Engage in program of study	Moderately High
	Validate curriculum	Moderately High
Employer Partners	Provide internships/externships or other work- based learning activity	High
Workforce Partners		
Common Common	Provide support services for students	High
Career Center	Identify and refer students	High

 ${\bf Table~TRC\text{-}2.~Implementation~of~MoHealthWINs~Core~Strategies}$

Core Strategy	Implementation	Important to Sustain/Scale			
Improved developmental education and skill enhancement	Not Planned	Somewhat important			
There is no specific Dev-Ed intervention within the grant-supported strategies. Developmental deficiencies were handled on a case-by-case basis.					
2. Intrusive student and instructional support services (e.g. tutoring, counseling, and advising)	Implementation	Extremely Important			
Provided by grant-funded counselor/advisor and faculty working with grant students. The counselor also provides a work success short course for CNA students that is available by request.					
3. Contextualized academic and technical education	Implementation	Extremely Important			
The basis for the CNA and CMT programs are professional licensure/state requirements and students participate in required clinical hours. There is no grant activity designed to contextualize Dev-Ed or academic courses.					
4. Career pathways designed around industry-developed stackable credentials.	Implementation	Very Important			
The programs are designed to be geographic extensions to multiple sites and have a stackable component within the non-credit sequence (CNA to CMT and Insulin certification). There is also a CPR certification embedded in the CNA course. There is not a larger scale pathway review/modification as part of grant efforts.					
5. Accelerated, chunking, modularization of courses	Planning	Very Important			
Courses are offered with staggered starts at different locations, various hours (day, nights), and student convenience is a strong consideration. Implementation of the MHW program was offered at 5 various sites in the TRC region.					
6. Credit for Prior Learning	Not Planned	Not Important			
Not a component of grant activities.					
7. Non-credit to credit bridges	Not Planned	Somewhat Important			
Not core element of grant activity. All grant courses are within the non-credit area.					
8. Expansion of online learning opportunities	Implementation	Very Important			
Students have access to Blackboard for assignments and testing and online skill videos.					
9. Faculty and staff development	Not Planned	Somewhat Important			
Faculty development is not a grant activity, although multiple performance for core skills for licensing examinations.	faculty have been trained to a	ssess task			

Table TRC-3. Major Accomplishments, Challenges, and Actions Taken to Address Challenges

Ma	jor Accomplishments up to the Present Time
1.	TRC was featured in a video for MHW.
2.	TRC was featured in an article in the MCCA newsletter.
3.	Ninety-nine percent pass rate once a student passed instructional material and clinical rotation.
4.	TRC presented twenty-one (21) CNA classes, thirteen (13) CMT classes, thirteen (13) Insulin Administration classes, twenty-one (21) CPR classes, and twenty-one (21) Professionalism and Job Readiness and Retention classes.
5.	TRC had working cooperative agreements to hold clinical rotations in twenty (20) long-term care facilities in the area.
6.	TRC completed classes within specified guidelines of program.
Ma	jor Challenges and Actions up to the Present Time
1.	The TRC grant was completed on September 30, 2014.

RECOMMENDATIONS FOR SUSTAINABILITY

The MHW Consortium was selected as a founding partner of the Transformative Change Initiative (TCI) Network in 2012. TCI is a project of the Office of Community College Research and Leadership (OCCRL), University of Illinois at Urbana-Champaign that is funded by three major foundations (Bill & Melinda Gates, Lumina, and Joyce) to support the scaling of innovations funded through TAACCCT. As part of this commitment, the MHW Consortium chose to focus considerable time and attention to not only implementation of grant-funded programs of study and strategies, but also to the sustainability and scaling of innovations associated with TAACCCT.

To move forward with TCI, MHW would do well to consider how the eight guiding principles associated with TCI can be used to develop a Consortium and co-grantee college sustainability plan. These eight principles are defined in more depth and along with resources at occrl/Illinois/edu/projects/transformative/change⁵. The guiding principles are defined briefly below, along with a set of questions to support sustainability and scaling planning. The guiding principles for scaling transformative change are:

• Innovations are chosen for scaling that show the potential to **spread and endure**.

To begin planning, the MHW Consortium should consider completing the following chart to help target innovations that are worthy of sustainability and scaling. The chart shows the two dimensions of spread and endure.

	Eı	ndure ———		
Spre	ead		Short-term (2-3 Years)	Long-term (Beyond 3 Years)
		Institution		
		Consortium/State		
	,			

The following principles provide a focus for developing strategic direction on sustainability and scaling. MHW's practitioners are encouraged to think about how they can address these principles, beginning by discussing the principle and considering how it can be fulfilled moving forward.

- Leaders envision, encourage, and support innovation that supports all learners.
 - o Who are the leaders of the MHW grant who can help innovations spread and endure?

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⁵ An extensive amount of resources resides on OCCRL's TCI website, including strategy briefs that feature the MHW Consortium as well as other Round One and Round Two TAACCCT consortia. Tools and templates to support scaling of innovation are plentiful in the section of the website labeled the *Transformative Change Toolkit*.

- What innovations should be targeted for sustainability and scaling?
- What leadership approaches support sustainability and scaling?
- Adoption and adaptation honor and influence the culture of the settings involved.
 - O What needs to happen to support adoption?
 - What needs to happen to support adaptation?
- Evidence collected through ongoing and responsive evaluation is used strategically.
 - o What evidence support sustainability and scaling?
 - What evidence should be collected to ensure that innovations are spreading and enduring over time?
- Storytelling is used to facilitate learning about innovation and transformative change.
 - o Who are the best storytellers about innovations and transformative change?
 - What stories should be told to support spread and endurance?
- Individuals engage in **networks** to gain access to expertise, professional development, and other vital resources.
 - What networks are being tapped to support sustainability and scaling?
 - o How can networks be used to support additional innovation and transformative change?
- **Dissemination** is led by individuals with deep knowledge of their settings.
 - What innovations are being disseminated, and how?
 - What plans encourage and support dissemination in the future?
- Effective and appropriate **technology** is used to strengthen resources and expertise.
 - o How does technology support the spread and endurance of innovations?
 - What technology can be used to strengthen resources and expertise to support sustainability and scaling?

APPENDIX A

Executive Summary: Mid-Point Implementation of MoHealthWINs

Debra D. Bragg, Jeffrey Flesher, & Pradeep Kotamraju

Introduction

This executive summary provides cross-site results for all 13 Missouri community colleges that are members of the Round One TAACCCT MoHealthWINs consortium. The 13 colleges that are the focus of this summary are:

- Crowder College
- East Central College
- Jefferson College
- State Technical College of Missouri
- Metropolitan Community College
- Mineral Area College
- Moberly Area Community College
- North Central Missouri College
- Ozarks Technical Community College
- St. Louis Community College
- State Fair Community College
- St. Charles Community College
- Three Rivers Community College

The next section presents cross-site results obtained through review and analysis of the 13 co-grantee site reports. Programs of Study (POS) and core strategies associated with the MoHealthWINs grant are discussed, along with innovations self-identified by each co-grantee college as a primary focus of the grant.

Following the cross-site analysis section, a site report is presented for each co-grantee college. Each report addresses the following evaluation questions:

- Who are the key stakeholders, and what are their roles, responsibilities, and potential to contribute to implementation of the MOHealthWINs grant at the co-grantee college?
- What is the status of implementation of the core strategies to support the MOHealthWINs grant at the cograntee college?
- What are the strengths and weaknesses of implementation of the MOHealthWINs grant at the co-grantee college?

Additional detail on the third party evaluation (TPE) methods, including interview protocols used to gather all qualitative data presented in this report, is available upon request.

Cross-Site Results

This section of the report describes cross-site results for the 13 Missouri community colleges that are affiliated with the Round One MoHealthWINs consortium. Collectively, the results show that the sites are progressing in implementing the grant-funded Programs of Study (POS) and moving to implementation of the numerous priority strategies that define the grant. These results show progress has been made since the previous evaluation report prepared by Cosgrove & Associates, Inc. (C&A) was presented to the consortium leadership in December 2012. The C&A report, which included results obtained from five site visits conducted by Bragg & Associates, Inc. (TPE), showed many grant activities in the pre-planning or planning stages. Given the focus of TAACCCT on capacity building, including the creation of new POS and related core strategies, this level of implementation was expected. To support forward movement toward fuller implementation, recommendations made by C&A included the following:

- Streamline grant-related processes
- Enhance the targeting of recruitment to targeted student populations
- Create or refine intrusive advising
- Define faculty roles more fully and clearly
- Broaden employer and industry connections

Although the co-grantees had begun implementing several new POS by Fall 2012, the C&A report emphasized the need for the co-grantee colleges to schedule and move deliberately toward implementation of POS that had not yet begun.

In conducting site visits in Spring 2013, C&A specified the need for the TPE (Bragg & Associates, Inc.) to assess the following nine strategies:

- Intrusive student and instructional support services (e.g. tutoring, counseling, and advising)
- Improved developmental education and skill enhancement
- Contextualized academic and technical education
- Career pathways designed around industry-developed stackable credentials
- Accelerated, chunking, and modularization of courses
- Credit for prior learning
- Non-credit to credit bridges
- Expansion of online learning opportunities
- Faculty and staff development

The following text presents TPE results pertaining to these strategies, highlights strengths and weaknesses associated with co-grantee implementation efforts, and offers suggestions for what can be done to bring about additional program improvements.

Strengths

Student Recruitment, Retention and Support: These functions have been central to the MoHealthWINs consortium. TPE interviews with students confirmed their excitement about the POS offered by the grant, despite some concerns about employment. With many students experiencing unemployment prior to enrolling in the programs, concerns about family living-wage employment was inevitable, making it especially important to track employment outcomes. To this end, the students were appreciative of the grant's potential to enhance their employability, including the possibility of their not having to travel outside the region to secure jobs. Many expressed their pleasure and gratitude for the intrusive support services that the grant supported, including guides to program requirements and step-by-step instructions for enrollment. Also critical to grant-funded support services was the hiring of professionals who provided advisement and on-going intensive supports. These specialists – sometimes called "career coaches" – were often seen as the "go to" professionals for

MoHealthWINs. The focus of their activities included a variety of intrusive advising methods (e.g. tutoring services, face-to-face and electronic counseling, and lab assistants). They also provided new student orientations and maintained regular contact with the target student populations, including helping to address program-related challenges.

Improved Developmental Education and Skill Enhancement: Several co-grantee colleges introduced new contextualized developmental education (Dev-Ed) instruction designed to advance low-skilled adults with very limited or no postsecondary education experience to college-level instruction. TPE interviews identified numerous cases where students began to see the value of a college education after participating in a non-credit course, and they either expressed interest in enrolling in college or actually enrolled in college. (APR results are needed to determine whether these statements are confirmed by quantitative results.) In addition, new POS were planned or implemented with the idea of accelerating and chunking Dev-Ed content and integrating it with technical instruction, thereby offering students the opportunity to develop technical competencies while earning credit toward stackable credentials. Further, despite considerable difficulties establishing adult bridge programming, due in part to funding and turf issues mentioned later (see the Weaknesses/Areas of Improvement section), some co-grantee colleges were planning to implement noncredit to credit pathways, including the consortium's largest co-grant colleges (St. Louis and Metropolitan). Given the student populations served by these regions, the engagement of these co-grantees in the creation of pathways to serve low-skilled adults represented one of the most important developments observed by the TPE at the mid-point of the grant.

Program Chunking, Modularization, and Acceleration of Online Learning: Across the consortium, several POS were created by breaking down or chunking the curriculum into modules, putting curricular content online, or using multiple industry-based certifications as part of cohort-based accelerated programming. The POS were scheduled to meet student needs, including using multiple locations, day and evening sessions, and staggered start dates throughout a typical semester time frame. Use of online leaning was also evident across the consortium, including the use of a mobile lab with state-of-the-art technology; installation of Information Technology (IT) virtual labs; and long-term care learning labs with equipment, supplies, and patient mannequin/simulators. Some new technologies and online learning tools that were introduced at one or more co-grantee colleges were made available throughout the consortium.

Industry Partner Involvement: Efforts to connect the co-grantee colleges with employers and other partners raised students' interests and encouraged their enrollment in POS, according to TPE interviews. Co-grantee colleges used a variety of techniques to engage employers, including guest presentations, tours, and practicums. Special consideration was given to establishing clinical sites across employer partners so that students could complete their work-based learning requirements in multiple settings. Though traveling a fair distance was required for some students to fulfill their clinical requirements, the colleges attempted to provide clinical experiences locally. Many clinical placements were supported by long-term care facilities due to the preponderance of these types of jobs across the state.

Career Center Involvement: Many regional career centers affiliated with one or more of the co-grantee colleges were acting as critical partners in the grant by taking on the role of recruiting, referring, and qualifying potential participants into the grant-funded POS. These centers engaged in program updates, distributing information, making potential participants aware of the POS, and providing ongoing WIA and other support. They also engaged in finding on-the-job training (OJT) placement opportunities for graduates.

Faculty Involvement: Within co-grantee colleges and across the consortium, faculty was instrumental in teaching and retaining students in their POS. They interacted extensively with student support personnel and served as the first line for intrusive advising when students had difficulties. TPE interviewers spoke to several faculty members who had recent industry work experience and strong contacts within their respective healthcare profession. Most faculty, particularly those hired specifically for the grant, seemed to understand the goals of the

grant and actively embraced the opportunity to develop new and innovative curricular and instructional approaches.

Grant Management: In the initial grant rollout, the senior administration in most co-grantee colleges took the lead on establishing structures and processes. As the grant progressed, faculty and student support personnel played a larger role in grant management with senior management continuing to be involved periodically (weekly and/or monthly updates). Co-grantee project leaders and staff reached out to engage other faculty and college groups in the grant, expanding the grant's reach within colleges and across the consortium. Moreover, the strategic use of task forces by MoHealthWINs has facilitated interaction among faculty and staff in areas of critical importance to the grant (e.g., data management, Prior Learning Assessment, etc.). Also, several cograntees, particularly those implementing similar POS, have discussed common data reporting needs, with an eye toward developing systemic processes and documentation to support implementation and the sustainability of POS once the grant ends.

Weaknesses/Areas of Improvement

Student Recruitment, Retention and Support: Whereas the student support process was recognized as integral to most if not all co-grantee colleges, there may be ways to generate additional student interest and boost retention to completion of the POS. These include creating an advisory support group to build student buy-in and early support for clinical experiences and ultimately for job placements; building a culture of success regarding completion, credentialing and employment so that students feel that support is continuously available and not bound by geography and space; and making sure that student enrollment is aligned with the capabilities of grant staff to provide support services adequately and efficiently.

Improving Developmental Education and Skill Enhancement: Some co-grantee colleges did not focus their grant activities on Dev-Ed, but many did. These included Dev-Ed reform that emphasized basic skills by allowing students to take third-party vendor-based assessments, employing technology-assisted strategies such as the "Portal" used at St. Louis and other community colleges, and creating adult bridge noncredit to credit courses. For some co-grantee colleges, contextualization was an obvious and natural fit with the grant, but others seemed to lack a basic understanding of what contextualization means or know how to implement it. Some even seemed unaware of or uncertain about the importance of creating pathways that include on-ramps (via adult education or Dev-Ed) to college credit-bearing instruction. Funding issues between the community colleges and adult education were mentioned by the co-grantees as a major contributor to difficulties creating viable adult bridge programs. However, as the grant moves forward, it may be useful to encourage co-grantee colleges to mentor one another, using the more experienced colleges to mentor newly adopting colleges, or in the least, facilitate in-depth conversations about promising practices among the colleges. To this end, it may also be helpful to hold a consortium-wide dialogue about Dev-Ed to explore how best to optimize innovations, staff time, and student access. For example, with pending changes to the GED test nationally, efforts among co-grantee colleges to develop new adult education programs using the GED may be ill advised. As a consortium, MoHealthWINs should investigate a wide range of adult education reforms to offer logical and sustainable next steps to the lowskilled adult population.

Program Chunking, Modularization, and Acceleration of Online Learning: TPE results show many cograntees were modifying existing or developing new POS consistent with the goals of the grant; however, some of these POS did not appear to have strong connections to previously existing POS, resulting in missed opportunities to create coherent career pathways. With respect to this concern, the consortium should consider formalizing and disseminating career pathway descriptions widely, including publicizing noncredit to credit bridges and articulation between POS within and across the consortium. Through more strategic coordination, the co-grantees might consider expanding online or blended instruction to attract more TAACCCT-targeted adult learners. If achieved, this activity might attract larger numbers of unemployed and low-wage working populations.

Industry Partner Involvement: Whereas the role of employers continues to increase in MoHealthWINs, there are still places where employer engagement could be bolstered. For example, employers could:

- consult more extensively on the development of POS,
- be engaged in conducting POS reviews,
- provide more job shadowing and internship opportunities,
- increase job placement support, and
- provide more job placements for POS completers.

When operating fully, the partnerships with employers created through TAACCCT might provide a model for enhancing technical program advisory committees in the future.

Career Center Involvement: Across the consortium, many career centers were successfully involved in the grant, but some were not. In areas where career centers had limited involvement with MoHealthWINs, the TPE heard concerns about limited interaction between career centers and the co-grantees. For example, some career centers were not engaged in recruiting or supporting student enrollment or involved in checking to see if clients were qualified for enrollment in TAACCCT, or TAA eligible. Clarifying expectations and resources, and addressing these engagement issues may help to sustain the engagement of the career centers in the long run.

Faculty Involvement: Across the consortium, faculty were instrumental in moving the grant forward by raising and sustaining student interest in the POS, creating new and modified programs of study, and connecting to industry in many ways. The key for sustainability is to create a core group of faculty across the consortium who share best practices in the areas of intrusive advising, curriculum development and redesign, and building community connections primarily with industry.

Grant Management: With the MoHealthWINs grant in its second year of implementation, the co-grantee colleges had put into place structures and processes to support the smooth running of the grant. However, several additional steps could be taken by co-grantee campuses and collectively across campuses to support greater effectiveness of grant management. First, the colleges could consider streamlining their admission processes by moving away from paper-based approaches to electronic systems. An electronic system may also support improvements to the student intake and intrusive advisement processes. Second, student enrollments, which appear to be somewhat uneven across the consortium, might be addressed if there were coordination across sites (e.g., eliminating unfilled slots in some locations and waiting lists in others; whether additional coordination is possible across the consortium is unknown but may represent a viable opportunity). Third, POS development has been decentralized to the co-grantee colleges, but more communication and coordination across the consortium might be beneficial. Fourth, the limited number of TAA-eligible participants is concerning, pointing to the importance of more strategic recruitment of this population or documentation of why these students are not enrolling.

Sustainability: Even though the MoHealthWINs grant has only advanced to the mid-point of the grant period, it is important to consider how grant-funded activities can be supported beyond the life of the grant. Expanding awareness of the new capacity of Missouri community colleges to address the needs of low-skilled adults is an important step. Creating a variety of outreach materials could help to show how TAACCCT-grant funding is evolving and addressing a critical skill shortage in healthcare – a high priority of the governor and community college leaders.

MoHealthWINs Innovations

This sections presents strategies that the co-grantee colleges identified as "innovations" based on their own self-identification of changes that they considered new and unique to their colleges. The TPE made no independent judgment of innovativeness and rather relied on the co-grantee college's determination of whether a strategy

should be deemed an innovation. The innovations are listed by co-grantee college and taken directly from the respective site reports (presented in the next section of this report). Table 1 aligns the innovations with the nine core strategies that were presented to the TPE as major areas to evaluate at the mid-point of the MoHealthWINs grant (mentioned earlier as an organizing framework for this TPE evaluation).

Several observations can be made about the strategies identified as innovations by the 13 Missouri community colleges involved in MoHealthWINs. The two strategy areas for which most co-grantee colleges noted innovations were intrusive student and instructional support services and accelerated, chunking, and modularization of courses. Eleven (11) of the 13 colleges identified strategies (9 at the implementation stage, 2 at the planning stage) aligned with intrusive student and instructional support, indicating that this strategy is very important to the co-grantees' programs. Other strategies with a substantial number of co-grantee college nominations were Dev-Ed and skill enhancement (8 total; 7 implementation and 1 planning) and career pathways designed around industry-developed stackable credentials (8 total; 5 implementation and 3 planning). Interestingly, none of the co-grantees identified credit for prior learning or faculty and student development as innovative strategies, and one college identified the non-credit to credit bridge strategy as an innovation. Given the adoption of a policy on Credit for Prior Learning by the Missouri community colleges, it is noteworthy that only one college identified a strategy associated with credit for prior learning as an innovation.

Crowder College

- Intrusive student and instructional support This activity was provided through tutoring and encouraging faculty and staff to create a culture of awareness about what students need to be successful. Career counseling for CNA students was emphasized.
- Acceleration chunking, and modularization of courses Multiple course scheduling options were being tested. An accelerated 14-month ADN program was scheduled to start in summer.

East Central College

- Developmental education and skill enhancement A Transitions program was the focus, with no traditional/legacy specific Dev-Ed intervention within the grant-supported strategies.
- Intrusive student and instructional support The program was provided by a grant-funded counselor/advisor, and the faculty was working with grant-funded students.
- Contextualized academic and technical education with for-credit group-based and non-credit self-paced
 options. The program was integrated in the learning center and included a completion celebration attended by
 campus leaders.
- Career pathways The basis for the CNA and CMT programs are professional licensure/state requirements, and students participated in required clinical hours. The HIM program was based on RHIT certification requirements. There was a stackable component within the non-credit sequence (CNA to CMT and Insulin certification).
- Acceleration, chunking, and modularization of courses Courses were offered on an 8-week schedule when needed (e.g., when Transitions students finished mid-semester). The Transitions course was offered to a 3-week intensive cohort with a self-paced non-credit version for students who selected that option.

Jefferson College

• Intrusive student and instructional support – Retention coach was in place and active, and a Career Coach hire was in process.

- Career pathways The CIS accelerated IT program included multiple employer-recognized credentials within the AAS degree program, similar to the traditional program except that students did not pay for the tests associated with the MoHealthWINs program.
- Acceleration, chunking, and modularization of courses The basis for the IT/CIS program was chunked curriculum and an accelerated format.
- Expansion of online learning IT/CIS was supported by online curriculum, and the Rad Tech program was in an initial phase of exploring online delivery.

State Technical College of Missouri

- Developmental education and skill enhancement The digital literacy course had embedded elements of developmental math and reading, but there were no strategies to modify existing Dev-Ed courses or programs.
- Intrusive student and instructional support This activity was provided by a grant-funded counselor/advisor and by faculty working with MoHealthWINs participants. The counselor was hired recently, but prior to that, grant staff and program faculty shared advising and counseling duties.
- Contextualized academic and technical education The Digital Literacy course used embedded Dev-Ed with work-based examples. The Introduction to Maintenance course included maintenance skills and clinical context awareness.
- Career pathways There was a stackable component within the non-credit HIM sequence, and there were
 multiple industry-recognized certifications in the Introduction to Maintenance course (i.e., OSHA, EPA,
 CPR). The grant did not include a larger scale integration of these grant programs with existing for-credit
 pathways.
- Acceleration, chunking, and modularization of courses Courses were offered on an 8-week schedule, except the Biomedical Technician, which was offered in 16 weeks.

Metropolitan Community College

- Developmental education and skill enhancement The grant allowed foundational skills to be embedded within new programs, eliminating the need for student participation in specific Dev-Ed courses. Individualized instruction supported by assessment with targeted skills development was accomplished online (WorkKeys assessment and remediation).
- Contextualized academic and technical education The IT program was designed around completion of industry-recognized credentials and certifications. The Sterile Processing course/program was based on state certification requirements and included the exam.
- Career pathways The career pathways were in development, with multiple new options and efforts to create bridge non-credit to credit courses. The healthcare pathway was in discussion, with pathways being defined for new programs. The IT program was based on industry certifications within the program.
- Acceleration, chunking, and modularization of courses The IT course and Sterile Processing program both had accelerated components. The Sterile Processing program was a two-course sequence that served incumbent and inexperienced students. Incumbent workers only needed to complete one of the two courses.
- Expansion of online learning Dev-Ed was embedded and individualized and also taught in an online module format. An IT course had multiple online components.

Mineral Area College

• Intrusive student and instructional support – A highly qualified and competent professional was hired to fill the support service role, who has proven to be an outstanding leader for the grant.

- Career pathways The College developed and introduced new certificate programs tied to industry
 certification in Industrial Maintenance and Pharmacy Tech. The Pharmacy Tech program had stackable
 credentials but the College had not yet created a pathway to the AAS. Discussion of this possibility was
 underway. The Maintenance Tech program was further along in the creation of a stackable credential leading
 to the AAS, and, whereas students were not far enough along to participate in an AAS degree program, the
 curriculum was being identified.
- Acceleration, chunking, and modularization of courses The College introduced flexible schedules and
 modularized, chunked curriculum in 4-, 8-, and 12-week formats. Pharmacy Tech was an accelerated
 program, and the online RN program was the same time frame, but different modality. MAC was also making
 format changes in the Maintenance class/learning community, and Maintenance Tech curriculum.
- Expansion of online learning The College developed online or hybrid versions of new courses for the Industrial Maintenance program and possibly Pharmacy Tech.

Moberly Area Community College

- Intrusive student and instructional support The existing clinical feedback process was expanded with progress checks and intrusive advising activities.
- Contextualized academic and technical education The basis for the MLT program was professional licensure/state requirements, and students participated in required clinical hours and hands-on laboratory experiences.

North Central Missouri College

- Developmental education and skills enhancement The focus was on WorkKeys modules and the Skills Enhancement program.
- Intrusive student and instructional support Limited student enrollment was occurring at the point of the TPE visit, but services were planned for integration into existing campus resources.
- Contextualized academic and technical education The accelerated Pharmacy Tech program was based on certification test requirements, including the exam. The online RN program is also based on certification standards.
- Career pathways The Pharmacy Tech program had a stackable credential inside the AAS. The online RN
 program fit within an existing pathway structure, but larger scale pathway review/modification was not part of
 grant efforts.
- Acceleration, chunking, and modularization of courses The Pharmacy Tech program was accelerated; the online RN was offered in the same time frame, but different modality.
- Expansion of online learning The Pharmacy Tech and RN programs were extensions of online efforts and a major focus of grant activities and investments.

Ozarks Technical Community College

- Developmental education and skill enhancement The Building and Maintenance (B & M) program and the Hearing Instrument Science (HIS) programs focused on skill enhancement (more so B & M than the HIS program).
- Acceleration, chunking, and modularization of courses The HIS course had been modularized to an 8-week course structure to reduce time to degree. The 8-week B & M program focused on low-skilled adults seeking entry into postsecondary education.

• Expansion of online learning – The HIS program was developed in a mobile lab with state-of-the-art technology that was being shared formally (through an MOU) with another college in the consortium.

St. Charles Community College

- Developmental education and skill enhancement The basis for the GED program is competency development at the pre-college Dev-Ed level.
- Intrusive student and instructional support The intrusive advising process started with grant staff sharing responsibility and college advising team awareness. Staff is being hired for career coaches.
- Career pathways The College partners with other colleges in a shared POS (HIS). The College does not "own" any of the programs but will provide advisement, coaching, clinicals, pre-requisites, and academic courses for the degrees. Early enrollment in one program (HIS) has five local participants; the rest are yet to launch/still in development.
- Acceleration, chunking, and modularization of courses GED program is chunked and does include the exam.
- Expansion of online learning GED blended online and face-to-face new-shared programs, and when partnering with other colleges, will include online aspects and site-based/mobile labs.

State Fair Community College

- Intrusive student and instructional support 46 students were provided support.
- Career pathways Single courses and options (i.e., Cardiac Sonography) were based on industry standards
 and received course credit included on transcripts, but the programs were generally stand-alone options
 without direct ties to the existing curriculum. Larger scale pathway review/modification was not part of grant
 efforts (e.g., credentials were not generated outside of existing associate degree or course sequence
 certificates).
- Acceleration, chunking, and modularization of courses The Phlebotomy course was accelerated, and a
 Mammography short course was planned for launch in summer, with multiple entry/exit points. The CT
 program also had multiple entry and exit options.
- Expansion of online learning Phlebotomy (implemented Fall 2012) and Sonography (scheduled launch August 2013) are online programs.

St. Louis Community College

- Developmental education and skill enhancement The Portal consists of assessment, remedial instruction through the Adult Learning Academy (ALA) and two new online courses: Culture of Healthcare and Digital Literacy for Healthcare. In the IT program, a blended approach to developmental reading had been accomplished, with embedded co-teaching based on course materials.
- Intrusive student and instructional support This activity was accomplished primarily by two grant staff who had previous experience as client managers in career centers. These "pathway coaches" provided support from initial enrollment through life skills training and intervention with at-risk participants. Several educational assistants provided tutoring support to Portal students M–F, 8:30am 5:00pm. The faculty, coaches, and educational assistants functioned as a team to support students in the Portal courses and within pathways and POS.
- Career pathways The career pathways were in development stage, with multiple new options and efforts to create bridge non-credit to credit courses. A Therapeutic pathway was in discussion. Pathways had been

- defined for new programs. POS associated with the Informatics pathway were based on industry certifications and stacked, with certification tests and degree options.
- Acceleration, chunking, and modularization of courses The Portal courses were fundamentally self-paced science boot camp short courses that were still in development in May when the TPE visited. Several POS associated with the Informatics and Therapeutic pathways were compressed.
- Expansion of online learning Informatics programs had multiple online components: Dev-Ed, as delivered through the ALA, included online modules and the Culture of Healthcare and Digital Literacy for Healthcare courses. Faculty and staff were working in collaboration with other co-grantee colleges under the direction of OLI and CAST to develop and deliver OER in accordance with current learning research. (This approach was not observed as a core content delivery method outside of an Informatics course.)

Three Rivers Community College

- Intrusive student and instructional support Students were supported by a grant-funded counselor/advisor, and faculty members were working with grant students. The counselor offered a "work success" short course for CNA students.
- Contextualized academic and technical education The basis for the CNA and CMT programs were professional licensure/state requirements, and students participated in required clinical hours. There was no grant activity designed to contextualize Dev-Ed or academic courses.
- Career pathways The POS were designed to be geographic extensions in multiple sites and have a stackable component within the non-credit sequence (CNA to CMT and Insulin certification). There was also a CPR certification embedded in the CNA course. No larger scale pathway review/modification was offered as part of grant effort.
- Acceleration, chunking, and modularization of courses Courses were offered with staggered starts at
 different locations, various hours (day, nights) and student convenience in mind. Implementation was
 occurring at three sites, with three more in the planning stage.

APPENDIX B

MoHealthWINs Programs of Study by College

Program of Study	College	Credit/ Non-Credit	Type Credential	Delivery Mode	Number Participants
Associate Degree, Nursing	CC	Credit	Degree	Blended	62
Associate Degree, Nursing	NCMC	Credit	Degree	Blended	11
Biomedical Equipment Tech	STC	Credit	Certificate	Blended	28
Certified Medication Tech	ECC	Non-Credit	Certificate	Face to Face	65
Certified Medication Tech	MCC	Non-Credit	Certificate	Blended	53
Certified Medication Tech	SCC	Non-Credit	Certificate	Face to Face	26
Certified Medication Tech	SFCC	Credit	Certificate	Blended	62
Certified Medication Tech	TRC	Non-Credit	Certificate	Blended	51
Certified Nursing Assistant	CC	Credit	Certificate	Face to Face	127
Certified Nursing Assistant	ECC	Non-Credit	Certificate	Blended	62
Certified Nursing Assistant	MCC	Non-Credit	Certificate	Blended	205
Certified Nursing Assistant	SCC	Non-Credit	Certificate	Face to Face	186
Certified Nursing Assistant	SFCC	Credit	Certificate	Blended	137
Certified Nursing Assistant	STLCC	Non-Credit	Certificate	Face to Face	86
Certified Nursing Assistant	TRC	Non-Credit	Certificate	Blended	187
Computed Tomography	SFCC	Credit	Certificate	Online	18
Computer Info Systems	JC	Credit	Certificate	Blended	50
Computer Support Tech	STC	Non-Credit	Certificate	Blended	49
Computer Support Tech	MCC	Credit	Certificate	Blended	68
Diagnostic Imaging-Sonography	SFCC	Credit	Degree	Blended	13
Digital Literacy	STC	Non-Credit	Certificate	Face to Face	278
Digital Literacy	MCC	Non-Credit	Certificate	Blended	129
Electronic Health Records	MCC	Non-Credit	Certificate	Blended	77
Electronic Health Records	STLCC	Credit	Certificate	Online	79
GED	SCC	Non-Credit	Certificate	Blended	200
Health Info Management	ECC	Credit	Degree	Blended	87
Healthcare IT Technician	STLCC	Credit	Certificate	Blended	34
Hearing Instrument Specialist	OTC	Credit	Degree	Blended	118
Help Desk & End User Support	STLCC	Credit	Certificate	Blended	57
ICD-10 Coding	SCC	Non-Credit	Certificate	Blended	59
Information Technology	MCC	Non-Credit	Certificate	Blended	66
Information Technology / Computer Info Systems	OTC	Credit	Certificate	Face to Face	5
Maintenance	OTC	Credit	Certificate	Face to Face	79
Maintenance	MCC	Non-Credit	Certificate	Face to Face	98

Program of Study	College	Credit/ Non-Credit	Type Credential	Delivery Mode	Number Participants
Maintenance	MAC	Credit	Certificate	Blended	22
Maintenance	MAC	Credit	Certificate	Blended	39
Maintenance	MCC	Credit	Certificate	Blended	31
Maintenance	STC	Non-Credit	Certificate	Face to Face	179
Maintenance	MCC	Credit	Certificate	Face to Face	14
Maintenance	MAC	Credit	Certificate	Blended	10
Maintenance	MCC	Credit	Certificate	Face to Face	38
Mammography	SFCC	Non-Credit	Certificate	Face to Face	27
Medical Assistant	STLCC	Non-Credit	Certificate	Face to Face	34
Medical Info Specialist	STLCC	Non-Credit	Certificate	Face to Face	18
Medical Lab Technician	MACC	Credit	Degree	Blended	24
Network Admin & Engineering	MCC	Credit	Degree	Blended	20
Office Clerk/Customer Service	STC	Non-Credit	Certificate	Blended	59
Patient Care Tech	SCC	Non-Credit	Certificate	Face to Face	13
Patient Care Tech	STLCC	Non-Credit	Certificate	Face to Face	123
Pharmacy Tech	MAC	Non-Credit	Certificate	Face to Face	81
Pharmacy Tech	MCC	Non-Credit	Certificate	Blended	105
Pharmacy Tech	NCMC	Credit	Certificate	Online	26
Phlebotomy	SCC	Non-Credit	Certificate	Blended	12
Phlebotomy	SFCC	Credit	Certificate	Blended	40
Portal Type	JC	Non-Credit	Certificate	Face to Face	37
Portal Type	STLCC	Non-Credit	Certificate	Blended	820
Portal Type	SCC	Non-Credit	Certificate	Face to Face	68
Portal Type	NCMC	Non-Credit	Certificate	Blended	70
Portal Type	ECC	Credit	Certificate	Face to Face	20
Practical Nursing	MCC	Credit	Certificate	Face to Face	58
Quality Management	SFCC	Non-Credit	Certificate	Face to Face	9
Radiologic Technology	JC	Credit	Degree	Blended	24
Systems Administration	STC	Non-Credit	Certificate	Face to Face	25

Note: The total does not add to the total number of participants for the consortium because participants can enroll in more than one POS.

APPENDIX C

Subject Matter Expert (SME) Review of Statement of Work

Identification of the MHW Work Plan Deliverables is based on statements using the verb "will," "shall," and "must" in the MHW Technical Proposal. This comprehensive list of statements was created to ensure that the MHW Consortium was fully compliant with all DOL expectations for deliverable review.	Is Subject Matter Expert Review required?	Participant Level Data	Internal Researcher Implementation Analysis	Grant Administrator	Third Party Evaluator	Curriculum Review	QNPR/APR
will serve the diverse workforce needs of the state and its citizens	NO	YES	YES				
will positively impact the way every member of the consortium provides services to students.	NO	YES	YES				
collaborate on program design, including the development of new curriculum and course redesign	NO		YES				
improve efficiency by eliminating redundancies and sharing best practices	NO		YES				
improve results by developing and assessing innovative approaches	NO		YES		YES		
Colleges will engage in outreach efforts to veterans and spouses of certain veterans	NO	YES		YES			
will abide by the provisions of the Jobs for Veterans Act.	NO	YES		YES			
will work to connect the target population of Missourians to good jobs in the state's growing and critical healthcare industry	YES	YES	YES				
will start with four of the five health services/sciences career pathways: health informatics, therapeutic services, diagnostic services, and support services	NO		YES				
MHW must offer training programs that enable adult learners to acquire technical and academic skills in meaningful and expedient ways	NO	YES	YES				
MHW students will enter a very fluid job market	N/A						
MHW will offer training for occupations that will be in demand for years to come	N/A						
implement programs supported by each of the four priority strategies	NO		YES		YES	YES	
Implementing a number of strategies will also test a number of evidence-based approaches to determine which result in the best outcomes	NO	N/A	N/A	N/A	N/A	N/A	N/A
will complement the existing framework of programs through which innovative instructional strategies, methodologies, and delivery methods will be woven	N/A						

Identification of the MHW Work Plan Deliverables is based on statements using the verb "will," "shall," and "must" in the MHW Technical Proposal. This comprehensive list of statements was created to ensure that the MHW Consortium was fully compliant with all DOL expectations for deliverable review.	Is Subject Matter Expert Review required?	Participant Level Data	Internal Researcher Implementation Analysis	Grant Administrator	Third Party Evaluator	Curriculum Review	QNPR/APR
Five colleges (JC, STC, MCC, OTC, and SLCC) will focus on program enhancements. To provide TAA, dislocated, and underemployed workers who have limited basic digital literacy skills a solid foundation, four colleges will develop digital literacy training.	YES		YES			YES	
Four colleges will develop digital literacy training to prepare workers for first-step jobs as data entry operators and office or customer assistants.	YES		YES			YES	
All [colleges] will ensure students master basic IT skills, earn one or more entry-level IT certifications, are prepared to be successful online learners, and understand their employment options throughout the IT and Health Informatics pathways.	YES		YES			YES	
In self-paced, online, and in-class instructional formats, students will build academic skills through contextualized instruction that demonstrates skills.	YES					YES	
In 4-, 8-, 12-, or 16-week modularized blocks, the classes/programs will accommodate assessed skill levels	YES					YES	
All colleges will introduce processes for awarding credit for industry certifications or other prior learning.	NO	YES	YES	YES			
The colleges will collaborate with the University of Missouri-Columbia as it restructures its baccalaureate IT program to align with two-year programs.	NO			YES			
The university will develop a third and fourth year online option to open access to adult graduates from consortium colleges.	NO			YES			
MCC will provide a remote-access IT laboratory capable of 200 simultaneous consortium student logins.	YES					YES	
Three colleges (EC, MCC, and SLCC), serving urban and rural populations, will restructure existing Health Information Technology programs to equip workers with the markedly different blend of skills needed to get or keep jobs	YES					YES	
STLCC will provide leadership, leveraging its membership in the Midwest Community College Health Information Technology Consortium, in crafting IT and traditional coding and Health Information Technology courses and programs into pathways that prepare workers for emerging Health Informatics occupations.	NO			YES			
STLCC will submit curriculum to the Missouri Department of Higher Education for approval on behalf of the colleges.	NO			YES			

Identification of the MHW Work Plan Deliverables is based on statements using the verb "will," "shall," and "must" in the MHW Technical Proposal. This comprehensive list of statements was created to ensure that the MHW Consortium was fully compliant with all DOL expectations for deliverable review.	Is Subject Matter Expert Review required?	Participant Level Data	Internal Researcher Implementation Analysis	Grant Administrator	Third Party Evaluator	Curriculum Review	QNPR/APR
STLCC will conduct training on the advanced online HIT certificates in the workforce roles defined by the Office of the National Coordinator for Health Information Technology (ONC).	NO			YES		YES	
The three colleges (EC, MCC, and SLCC) will also incorporate a combination of other non-credit training and credit certificate and degree programs, thus providing multiple points of access to this pathway.	YES					YES	
The colleges will leverage existing IT and Health Information Technology courses, certificates, and degree programs as rungs on the Health Informatics ladder/lattice	YES					YES	
JC has elected to institute a point of access that would allow the participant to access training for digital literacy and remediation of core subject matter.	YES					YES	
The consortium colleges will create entry-level "healthcare portals" that feature diagnostic assessment, contextualized basic skills development, and career exploration and coaching.	YES					YES	
A career blueprinting component will help students map their healthcare career and initiate healthcare career portfolios that ultimately capture applicable prior learning and experience converted into college credit.	YES	YES				YES	
Digital literacy courses or programs will connect HIT, IT, and business program courses or competencies.	YES					YES	
Professional development will introduce faculty to interdisciplinary approaches needed to prepare the emerging HIT workforce.	NO			YES			
STLCC will also design a medical services workforce outsourcing center that will provide work-based learning opportunities (internships, consulting opportunities, etc.) for students and will employ HIT and other healthcare program graduates as consultants. This center will be designed to provide consulting services and technical assistance to healthcare providers implementing or supporting their own EHR systems.	YES			YES			
Therapeutic Pathway projects will expand the pool of qualified nursing personnel across Missouri.	N/A						
Seven colleges (CC, EC, MCC, NCMC, SFCC, STLCC, and TRC) will introduce innovative, flexible training and educational nursing certificate and degree options.	YES					YES	

Identification of the MHW Work Plan Deliverables is based on statements using the verb "will," "shall," and "must" in the MHW Technical Proposal. This comprehensive list of statements was created to ensure that the MHW Consortium was fully compliant with all DOL expectations for deliverable review.	Is Subject Matter Expert Review required?	Participant Level Data	Internal Researcher Implementation Analysis	Grant Administrator	Third Party Evaluator	Curriculum Review	QNPR/APR
Four colleges (MAC, NCMC, OTC, and SFCC) will create other therapeutic healthcare technician certificate options.	YES					YES	
MHW will introduce intensive and intrusive student services models to improve academic preparation and readiness for the significant challenges many students encounter attempting to enter and succeed in ADN programs.	NO		YES		YES		
MAC and NCMC will develop a hybrid version of a non-credit, accelerated 16-week, 42-hour program that prepares students to take the National Pharmacy Technician Exam.	YES					YES	
OTC will utilize a two-year Hearing Instrument Specialist degree program featuring a hybrid, technology-enabled format. Student cohorts not able to complete assignments at OTC's Springfield campus will engage in hands-on lab exercises and skills evaluations in flexible time frames at convenient locations in a mobile hearing lab that will travel to consortium colleges (SCC) and locations across the state.	YES					YES	
MACC will develop the first online program in synchronous and asynchronous formats to increase training opportunities across the state.	YES					YES	
Three colleges (SCC, MAC, and SFCC) will introduce short-term, non-credit Phlebotomy programs as additional pathway access points for entry-level workers. Patterned after established programs at consortium colleges, the new programs will blend classroom, labs, and online offerings. Course modularization will enable students to apply portions of the Phlebotomy training to MAC's IV Therapy course, MACC's Medical Lab Technician program, and complement SFCC's CNA program.	YES					YES	
Four colleges (JC, MAC, SFCC, and SCC) will address regional diagnostic technician workforce needs. JC and SCC will develop and share the expense of a joint Radiologic Technology AAS degree program. Area employers have committed to equip a laboratory on the JC campus. Didactic courses will be delivered at JC and transmitted to JC and SCC students in synchronous online format. Online simulation software will enable distance learners to practice techniques that will be honed in the JC campus lab.	NO					YES	
SFCC will develop two new online Advanced Radiology Certifications programs of study.	YES					YES	

Identification of the MHW Work Plan Deliverables is based on statements using the verb "will," "shall," and "must" in the MHW Technical Proposal. This comprehensive list of statements was created to ensure that the MHW Consortium was fully compliant with all DOL expectations for deliverable review.	Is Subject Matter Expert Review required?	Participant Level Data	Internal Researcher Implementation Analysis	Grant Administrator	Third Party Evaluator	Curriculum Review	QNPR/APR
SFCC will develop a new online Diagnostic Medical Sonography AAS degree program of study.	YES					YES	
Four colleges (STC, MCC, MAC, and OTC) will develop additional certificate options in their Industrial Technology and Heating, Ventilation and Air Conditioning programs and strengthen programmatic links to industry certifications	YES					YES	
MAC will introduce a hybrid, integrated software training option.	YES					YES	
STC, MCC, SCC, and OTC will develop an Introduction to Maintenance program, integrate academic skills training, and reconfigure curriculum to increase statewide access and training options, thus creating multiple new opportunities for workers to qualify for jobs as Environmental Services Aides, Medical Equipment Repairers, Sterile Processing Technicians, Central Service Technicians, Environmental Maintenance Technicians, Stationary Engineers/Boiler Operators, and, ultimately, Energy Managers.	YES					YES	
STC will introduce an online Biomedical Technician certificate accessible to qualified students interested in upgrading their technical skills.	YES					YES	
Students will be prepared to earn an entry-level industry certification	NO	YES	YES				
OTC will serve as the fiscal agent for the project	NO			YES			
All purchases shall be handled in accordance with commonly accepted business procedures and must be substantiated with the necessary records to satisfy audit and inventory requirements and all applicable law	NO			YES			
OTC will complete a request for funds at least on a quarterly basis, and in shorter increments of time when needed	NO			YES			
All consortium colleges will maintain records, including but not limited to, requests for funds, invoices, and ledgers of revenues and expenses. Salaries and fringes charged to the grant budget will require backup documentation to record percentage of time dedicated to grant activities and must include appropriate budget authority signatures	NO			YES			
MCCA will assist OTC with program administration and coordination	NO			YES			
The Project Manager will be employed by OTC	NO			YES			

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The Project Manager's core responsibilities will include ensuring that all fiscal and performance measures are reported to OTC as required by the USDOL; participating in the development and assessment of programming on each consortium college's campus; strengthening and expanding program networks; leading ongoing employer outreach efforts; and creating a model of grant implementation based on collaboration, respect, and continuous improvement	NO			YES			
The Project Manager will be responsible for all fiscal and quarterly reporting. Each consortium college will have an individual who serves	NO NO			YES YES			
as a liaison to the Project Manager The Lead Team will oversee project strategy development, implementation, and sustainability as well as aid in third-party evaluation	NO		YES				
Student services and academic staff from each consortium college will attend regular in-person and online meetings focused on implementation of best practices	NO			YES			
These personnel will be actively engaged in assessing and continually improving funding priority strategies.	NO			YES			
Consortium college institutional research and budget staff will also participate in ongoing training and collaboration.	NO			YES			
College personnel contribute to an online library of documents including forms, information pertaining to the grant, other states' experiences implementing the grant, and data collection.	NO			YES			
Consortium colleges will meet periodically with employer groups to discuss training needs and the extent to which MHW is meeting those needs.	NO				YES		YES
Employers will be invited to participate in focus groups convened by the Missouri Economic Research and Information Center (MERIC) to systematically collect data about employer needs.	NO			YES			
MHW colleges will ensure the proposed strategies – as they prove successful – will be introduced, vetted, and ultimately written into the fabric of institutional practice, thus sustaining them after the end of grant period.	NO		YES		YES		
Current college faculty and staff will engage in significant program training and development, thus ensuring a solid and supportive human capital base.	NO		YES				YES

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Changes in training program design and delivery formats will open up significantly more opportunities for collaborative relationships with area WIBs and other workforce development agencies.	NO			YES	YES		
New courses and programs will be supported by tuition and traditional funding streams that support technical programming after grant funding ceases.	NO				YES		
MCCA's annual conference and other sponsored programs will provide additional opportunities for continued discussion and professional development pertaining to assessment and implementation of program approaches.	NO			YES			
A continuous feedback loop will be developed among employers, WIBs, the state Division of Workforce Development, the Department of Higher Education, and others to insure that the model developed will adjust and continuously align with changes in workplace needs, innovative learning processes, and funding opportunities.	NO		YES		YES		
The consortium will undertake a rigorous evaluation process that will include the collection of highly detailed program data on each participant, as well as the careful tracking of measures for each program strategy and outcome.	NO		YES		YES		
The consortium will employ a Lead Researcher with responsibility for convening consortium colleges to develop sustainable processes and systems to collect participant data, performance data, and evaluate programs.	NO		YES				
Lead Researcher will also have ultimate responsibility for procuring a Third-Party Evaluator (TPE) with demonstrated experience in developing and/or implementing similar deliverables.	NO		YES				
To support continuous improvement, the Lead Researcher will collaborate with the TPE to structure and provide leadership for an evaluation process that includes timely feedback for program implementers and leaders at the consortium institutions.	NO		YES				
The Lead Researcher and the TPE will attend key project meetings and activities and provide data for the MHW Lead Team each quarter to inform improvements in participant outcomes and program performance.	NO		YES				

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The Lead Researcher will also provide quarterly and annual performance reports, as well as the final performance report.	NO		YES				
All students will be tracked through college-based data systems as well as the common database for the public workforce system.	NO		YES				
In addition, the colleges will track: enrollment, retention, grade point average, transfer credits, college placement scores, skill assessments, existing certifications, and graduation with certificate or degree.	NO		YES				
The Lead Researcher will work with consortium colleges to enhance data collection for non-credit workforce training.	NO		YES				
One college (JC) will utilize an outside agency to assist with the integration of Banner and Cognos reporting software. This will allow for expedited and seamless data transfer to the lead researcher and TPE.	NO		YES				
Many grant participants will access MHW programs through the public workforce system, Missouri's Job Matching portal, MissouriCareerSource.com. (MCS)	N/A						
By utilizing this system for tracking participants in this grant (TAA and WIA-funded participants, as well as others), consortium colleges will have the capacity to follow participants through the training and into their employment future.	NO			YES			
Since the state uses data from this system to report USDOL Common Measures, using it additionally for this grant will be simplified.	NO			YES			
As students begin coursework, they can develop their record in MCS, either on their own or with assistance from provider staff, which will begin that base record	NO			YES			
The MHW project will also leverage the database management and research and evaluation capabilities of the Missouri workforce longitudinal data system (LDS) that, once complete, will emphasize linkage between the existing educational enrollment data, UI wage records, adult training programs, and social support services.	NO			YES			
The system, being developed by Missouri's Division of Workforce Development and its partner agencies, will consist of: 1) Unit records from all workforce programs	NO			YES			

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The system will consist of: 2) Systematically and periodically linking those unit records to data systems describing customer experience outside the workforce system (e.g., the statewide longitudinal data system or SLDS).	NO			YES			
The system will 3) Includes all available work- and education-related data reflecting experiences occurring sequentially over a span of several years for the purpose of longitudinal research.	NO			YES			
The Lead Researcher will work with state administrators to leverage the capabilities of this new system as it evolves during the grant period.	NO			YES			
The Lead Researcher with work with leaders at each college to set up a data collection protocol that provides a quarterly (or more frequent) feedback loop to program implementers.	NO		YES				
The proposed evaluation process will include progress, implementation, and outcome measures evaluation.	NO		YES		YES		
Participating colleges will outline key, milestone implementation steps required to move from planned activities to actual implementation.	NO		YES		YES		
The Principal Investigator (PI) will work with each college to ensure that such steps are implemented in a logical and timely manner.	NO		YES		YES		
The Lead Researcher will work with each college to agree upon an annual set of performance measures to measure participant outcomes, as well as to identify specific areas which require improvement.	NO	YES	YES		YES		
In addition, the Lead Researcher and the PI will work with each college to design appropriate data tracking strategies appropriate for the college's data enterprise system and scope of grant activity.	NO	YES	YES		YES		
It is anticipated that the average wage for grant participants will be lower	N/A						
As participants move along the career pathway, it is anticipated that wages will increase beyond the life of the grant.	N/A						
Additional comparison cohorts for the grant will be identified across the state to include TAA participants and other low-skilled adults.	NO		YES				

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Detailed demographic data will be recorded for each MHW participant.	NO		YES				
All are committed to program improvement efforts that benefit the target population, including systematic review of existing curricula to identify potential chokepoints.	NO		YES		YES	YES	
All are committed toasset mapping of consortium curricula, equipment, staff, and facilities.	NO		YES		YES	YES	
All are committed toreview of state accreditation standards implementation.	NO		YES		YES	YES	
All are committed toa consortium approach to curriculum development, validation of employment and employer needs in each degree and certificate.	NO		YES		YES	YES	
All are committed toconsortium alignment of entry tests (WorkKeys, Compass, and Accuplacer).	NO		YES		YES	YES	
All are committed tointegration of the National Career Readiness Certificate (NCRC) throughout the pathway.	NO		YES		YES	YES	
Develop diagnostic assessments, remediation, and career counseling services that support student success (Strategy 1.1).	YES					YES	
Introduce contextualized academics within technical skills framework (Strategy 1.2).	YES					YES	
Introduce flexible schedules and curricular structures: modularize, chunk, 4-, 8-, 12-week formats. (Strategy 1.3)	YES					YES	
Contextualize academics into foundational courses or provide concurrent enrollment technical and academic courses.	YES					YES	
Provide substantial tutorial support or supplemental instruction. (Strategy 2.2)	YES					YES	
Introduce intrusive student services to include tutorial supports, retention counseling, internships, and learn/earn opportunities. (Strategy 2.3)	NO					YES	
Develop standard practices to award for prior learning and/or non-credit training. (Strategy 2.4)	NO	YES	YES	YES			
Active employer and state Division of Workforce Development engagement to develop industry-driven credentials, certificates, and degrees. (Strategies 3.1; 3.2; 3.3)	NO			YES	YES		

Identification of the MHW Work Plan Deliverables is based on statements using the verb "will," "shall," and "must" in the MHW Technical Proposal. This comprehensive list of statements was created to ensure that the MHW Consortium was fully compliant with all DOL expectations for deliverable review.	Is Subject Matter Expert Review required?	Participant Level Data	Internal Researcher Implementation Analysis	Grant Administrator	Third Party Evaluator	Curriculum Review	QNPR/APR
Structure programs into stackable credential career pathway model of credit/non-credit options tied to industry certifications. (Strategy 3.4)	YES					YES	
Develop online or hybrid versions of courses or programs. (Strategies 4.1 and 4.2)	YES					YES	
Introduce/expand self-paced online academic remediation resources. (Strategy 4.3)	YES					YES	
Enhance training with online simulation software. (Strategy 4.4)	YES					YES	
A common, overarching consortium goal is Strategy 3.4, the development of a standard stackable credentials model for each of the health sciences/services pathways that ties credit or non-credit components	YES					YES	
Prepare and encourage students to tackle the next level of IT training: a Computer Support Technician credential	YES					YES	
All of the colleges will modularize at least one course in each certificate or degree program for easier interface with short-term, non-credit training.	YES					YES	
Consortium colleges will submit all documentation to OTC in accordance with the timelines set forth in this application and established by the USDOL. Grant funds will be disbursed as costs are incurred.	NO			YES			
The initial comparison cohort included below is served by a USDOL National Emergency Grant; all were STLCC trainees laid off from the Chrysler plant in St. Louis and are TAA eligible. Most of the 82 participants in the comparison group are currently in training. The average wage for the comparison cohort reflects placement across multiple industries, and it is anticipated that the average wage for grant participants will be lower, reflecting placement mostly in entry-level jobs in the healthcare industry.	N/A						
Strategy 1.1 EC/MAC/MCC/NCMC/SLCC/SCC: Health portal structure to include assessment of academic and technical skills, skills benchmarking; interest inventories, self-paced academic remediation; career exploration/coaching; soft skills and healthcare portfolios; SLCC/SCC: GED accelerated online tutorial/ preparation courses; JC: Tutorial/preparation courses to eliminate remedial course work.	YES					YES	

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Strategy 1.2 STC: Digital Literacy, Computer Support, Introduction to Maintenance classes; OTC: Digital Literacy, Introduction to Maintenance; MCC: Digital Literacy, Introduction to Maintenance learning communities; SLCC: CNA, MIIS, PCT, IT Help Desk/ End User Support Specialist; ALL: Students will be prepared to earn an entrylevel industry certification.	YES					YES	
Strategy 1.3 CC: Summer ADN courses; JC: modularize multiple courses in IT curriculum; EC/MCC/SFCC/SLCC: Health Informatics courses; MCC: Industrial Technology and HVAC courses; Nursing, HIT Pathways; SLCC: Portal, Medical Intake Info Specialist, IT Help Desk, PCT, Boot Camps, EHR; LS/MCC/MAC/OTC: Introduction to Maintenance class/learning community; OTC: 8-week block for Maintenance Tech (Years 2 & 3), 8-week block format for first 3 courses in NET degree (Year 1 only); LS/MCC/OTC/SLCC: Digital Literacy; LS/MCC/OTC: Introduction to Maintenance; MAC: Maintenance Technician; OTC/SCC: Hearing Aid Specialist; SCC: Sterile Processing Tech.	YES					YES	
Strategy 2.1 EC: Contextualized academics modules for entry- level, non-credit CNA and CMT programs; JC/LS/MCC/OTC/SLCC: contextualized modules/lessons integrated into Dev-Ed courses, introductory technical courses, and Portal programs.	YES					YES	
Strategy 2.2 CC: ADN program; EC/SLCC: Science Boot Camps within the portal; MCC: Learning Specialist embedded in Digital Literacy, Nursing, HIT, and Intro to Maintenance programs; SCC: GED tutorial support; JC: Instructional Assistant embedded in CIS – Computer Support Certificate.	YES					YES	
Strategy 2.3 EC: Transition/Placement Specialist for Nursing and Health Informatics; EC/MCC: Business/Industry Outreach Coordinators; MCC: IT and Maintenance internships; SCC/OTC: Retention Specialist; SLCC: Portal and IT Helpdesk, Medical Services Outsourcing Center; MAC: Maintenance and Pharmacy Tech internships and/or clinical practice with retention counseling; JC: JASSI, CIS, and Rad Tech.	YES					YES	

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Strategy 2.4 All colleges: Identify industry certifications aligned to course and/or programs for credit by certification; develop at least two course assessments in Health Service/Sciences program areas to validate prior learning through credit by examination.	NO	YES	YES				
Strategy 3.1 EC: 3 Health Informatics Specialist; SFCC - Phlebotomy; LS: Office Clerk/Customer Service IT and Computer Support Technician; MCC: Computer Support Technician, 3 Health Informatics Specialist; MAC: Industrial Maintenance; SLCC Healthcare IT Technician, career pathway bridge from CNA to ADN; Cyber Security Post Degree Certificate of Proficiency; TRCC: 3 Medication Technician; CNA; Feeding Assistant; MAC/NCMC: Pharmacy Technician; SCC: Sterile Processing Technician.	YES					YES	
Strategy 3.2 EC: Health Information Technology; JC/SCC: Radiologic Technology; SFCC: Diagnostic Medical Sonography; MCC/OTC: Systems Administration/Engineering; OTC/SCC: Hearing Aid Specialist.	YES					YES	
Strategy 3.3 EC/SLCC: WorkKeys assessments for CNA/CMT; CC: Offer CNA in multiple McDonald County sites; OTC/SLCC: Computer Support Technician; MCC: Maintenance Technician, Nursing, HIT; JC: Computer Information Systems; SLCC: Revise existing IT Helpdesk; SFCC: CNA and CMT; SCC: Phlebotomy.	YES					YES	
Strategy 3.4 All Colleges: Develop standard stackable credentials model for Health Services/Sciences pathway capturing non-credit and credit credential, certificate, degree options and linkages and articulation via online/hybrid programming between colleges and with baccalaureate institutions as well as appropriate industry certifications. Use model to develop similar information for other clusters.	YES					YES	
Strategy 4.1 EC: hybrid Nursing/Health Informatics Boot Camp modules; JC: multiple IT courses; LS: Office Clerk/Customer Service and Computer Support Technician; MAC: Maintenance Technician and Pharmacy Tech certificates; MCC: Info Tech; NCMC: Pharmacy Tech certificate; SFCC: Phlebotomy, Radiology Advanced Certificates TRCC: CNA, Medication Technicians; MCC/SLCC: Digital Literacy for Healthcare Portal, Healthcare IT Technician; HIMs.	YES					YES	

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Strategy 4.2 CC: ADN Nursing; JC: IT courses; LS: System Admin/Engineer; Certified Biomedical Technician; MACC: Medical Lab Technology degree; MCC: Info Tech and HIT; NCMC: ADN Nursing; OTC: Computer Support Technician (Year 1 only); SCC: GED tutorial/preparation; SLCC: Health Informatics certificates, convert EHR (HIT 551, 553, 554, 555, and 556/IT 552) and HIT 550.	YES					YES	
Strategy 4.3 EC/MCC/NCMC/SLCC: KeyTrain systems into portal and IT Helpdesk at SLCC; SCC: Online GED remediation/preparation.	YES					YES	
Strategy 4.4 JC/SCC: Radiologic Technology lab components; MCC: Remote Access/Simulation IT lab; MAC: Online simulation software-Maintenance Technician; OTC/SCC: Hearing Specialist Mobile Training Lab; SLCC: HIT simulation software.	YES					YES	

APPENDIX D

MoHealthWINs Subject Matter Expert Curriculum Review Rubric

Curriculum Review Categories	Exceptional (4)	Very Good (3)	Good (2)	Ineffective (1)
Program/Student Learning Outcomes and Program Map				
Program CIP code/s appropriate to program title and outcomes				
Effective program structure (prerequisites, course sequence, delivery methods, classroom/laboratory blend, stackable credential-structure provide a clear, logical "map" to completion for adult students)				
Outcomes aligned to occupational focus (industry skills and standards)				
Outcomes clearly stated				
Outcomes introduced/reinforced effectively				
Evidence of capstone assessment (licensure, industry certification, capstone project, or TSA)				
Comments or recommendations:				
Course Objectives	Exceptional	Very Good	Good	Ineffective
Appropriate to course level				
Clearly stated from student perspective				
Measurable				
Address/support one or more outcome				
Comments or recommendations:				
Module or Unit Objectives	Exceptional	Very Good	Good	Ineffective
Clearly linked to course objectives				
Address one or more course objective				
Clearly stated from student perspective				
Measurable				
Comments or recommendations:				
Instructional Materials and Lab Resources	Exceptional	Very Good	Good	Ineffective
Support stated course and module or unit learning objectives				
Meet/reflect current industry practices and standards				
Provide options for multiple learning styles				
Resources/materials are cited properly				
Evidence of innovation to support adult learner success				
Comments and recommendations:			•	•

Curriculum Review Categories	Exceptional (4)	Very Good (3)	Good (2)	Ineffective (1)
Learning Activities	Exceptional	Very Good	Good	Ineffective
Promote achievement of stated module or unit objectives				
Materials/resources (to include equipment, tools, and software) are presented in a way that students understand purpose and use in healthcare and other industry settings				
Provide opportunities for interaction and active learning				
Provide options for multiple learning styles				
Linked to current industry practices and standards				
Evidence of innovation to support adult learner success				
Comments and recommendations:				
Assessment Tools/Criteria for Evaluation	Exceptional	Very Good	Good	Ineffective
Measure stated learning objectives and link to industry standards				
Align with course activities and resources				
Include specific and descriptive criteria for evaluation of student work/participation				
Sequenced throughout instructional period to enable students to build on feedback				
Varied and appropriate to content				
Provide opportunities for students to measure their own learning progress				
Comments and recommendations:				
Innovative or enhanced strategies	Exceptional	Very Good	Good	Ineffective
Evidence industry input/standards in program design and curricular components				
Evidence of program enhancements to support adult learner				
If program has run long enough, is there evidence that enhancements to it have improved pass rates?				
Comments or recommendations:				

APPENDIX E

MoHealthWINs Subject Matter Expert Curriculum Review Summary Results

Subject Matter Curriculum Review Rubric – Items by Major Categories	Average Rating
Program/Student Learning Outcomes and Program Map	
Program CIP code/s appropriate to program title and outcomes.	2.8
Effective program structure (prerequisites, course sequence, delivery methods, classroom/laboratory blend, stackable credential-structure provide a clear, logical "map" to completion for adult students)	2.9
Outcomes aligned to occupational focus (industry skills and standards)	3.2
Outcomes clearly stated	3.2
Outcomes introduced/reinforced effectively	3.2
Evidence of capstone assessment (licensure, industry certification, capstone project, or TSA)	2.9
Course Objectives	
Appropriate to course level	3.2
Clearly stated from student perspective	3.1
Measurable	2.9
Address/support one or more outcome	3.2
Module or Unit Objectives	
Clearly linked to course objectives	3.1
Address one or more course objective	3.2
Clearly stated from student perspective	3.0
Measurable	3.0
Instructional Materials and Lab Resources	
Support stated course and module or unit learning objectives	3.2
Meet/reflect current industry practices and standards	3.1
Provide options for multiple learning styles	2.9
Resources/materials are cited properly	3.0
Evidence of innovation to support adult learner success	2.8
Learning Activities	
Promote achievement of stated module or unit objectives	3.1
Materials/resources (to include equipment, tools and software) are presented in a way that students understand purpose and use in healthcare and other industry settings	3.0
Provide opportunities for interaction and active learning	3.1
Provide options for multiple learning styles	3.0
Linked to current industry practices and standards	3.0
Evidence of innovation to support adult learner success	2.9
Assessment Tools/Criteria for Evaluation	
Measure stated learning objectives and link to industry standards	3.0
Align with course activities and resources	3.1
Include specific and descriptive criteria for evaluation of student work/participation	2.9
Sequenced throughout instructional period to enable students to build on feedback	3.0
Varied and appropriate to content	3.0
Provide opportunities for students to measure their own learning progress	2.9
Innovative or enhanced strategies	
Evidence industry input/standards in program design and curricular components	3.1
Evidence of program enhancements to support adult learner	3.0
If program has run long enough, is there evidence that enhancements to it have improved pass rates?	2.4

Note: Average ratings are for all programs of study and based on the rubric that Subject Matter Experts (SMEs) used when evaluating MHW curriculum. The scale was: Exceptional (4), Very Good (3), Good (2), and Ineffective (1).

"This workforce solution was funded by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. The solution was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership."



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