Scale-Up SELA
Final Evaluation Report

Delgado Community College
Scale-Up Southeast Louisiana
TAACCCT Round 4

September 2018

Delgado COMMUNITY COLLEGE

SCALE-UP SOUTHEAST Louisiana
Advanced Manufacturing & Energy Training

Submitted to:
U.S. Department of Labor:
Employment & Training
Administration

Submitted by:
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ACKNOWLEDGEMENTS

Thank You

To the leadership of Delgado Community College for your support an active engagement in the Scale-Up SELA program.

To the faculty and staff at Delgado for your hard work in implementing the Scale-Up SELA program and your valuable insights about the program.

To the employers, community partners, and participants who met with the Evaluation Team and provided feedback about the program throughout the implementation.

To the U.S. Department of Labor for funding this program and evaluation.

The Evaluation Report

This final evaluation report was developed by Thomas P. Miller & Associates, LLC. Evaluation report contributors included:

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The Scale-Up SELA program at Delgado Community College is funded in whole by a federal award: a $2.5 million grant awarded by the U.S. Department of Labor's Employment and Training Administration. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the official position of USDOL.

EXECUTIVE SUMMARY

Program Overview

The Scale-Up SELA program sough to increase job placements for program participants by training them in a variety of disciplines, providing opportunities to increase industry recognized credential attainment, and offering students innovative instruction delivery approaches. Throughout the grant, grant staff sough to enhance advanced manufacturing trainings to meet the needs of local industry. Grant staff developed and enhanced non-credit programs in Welding, Pipefitting, Electrical, and Industrial Maintenance, and credit programs in Electrical, Industrial Maintenance, Precision Machining, Process Instrumentation and Controls, and Welding. Scale-Up SELA enhanced most of these credit and non-credit programs through corresponding introductory courses (Core Plus or Tech 101). Additionally, programs were enhanced through new equipment, the embedding of industry recognized credentials, the development new courses within the fields of study. Credentials embedded into the Scale-Up SELA program included NCCER Core, NCCER Level 1, NCCER Level 2, and in some cases, NCCER Levels 3 and 4.

Table 1. Scale-Up SELA Programs and Associated Credentials

Non-Credit Programs		Credit Programs	
Program Area	**Industry Based Credential**	**Program Area**	**Industry Based Credential**
Core Plus	NCCER Core OSHA 10[1]	Tech 101	NCCER Core
Electrical	NCCER Core NCCER Level 1 NCCER Level 2	Electrical	NCCER Level 1 NCCER Level 2 NCCER Level 3 NCCER Level 4
Industrial Maintenance Mechanic	NCCER Core NCCER Level 1 NCCER Level 2	Industrial Maintenance	NCCER Level 1 NCCER Level 2
Pipefitting	NCCER Core NCCER Level 1 NCCER Level 2	Precision Machining	NCCER Level 1 NCCER Level 2
Welding	NCCER Core NCCER Level 1 NCCER Level 2	Process Controls and Instrumentation	OSHA 30 IBC
		Welding	NCCER Level 1 NCCER Level 2

Courses in these programs were further modified through the incorporation of team teaching and hybrid learning opportunities which allowed the Scale-Up SELA program to accommodate all types of learners. Students in these programs also received intrusive advising supports, concentrated job readiness and placement services. Instructors received professional development related to Challenge Exams for Prior Learning Assessments, and some instructors reached professional development related to their certifications to teach technical course, including OSHA 10 and AWS Welder Qualifications.

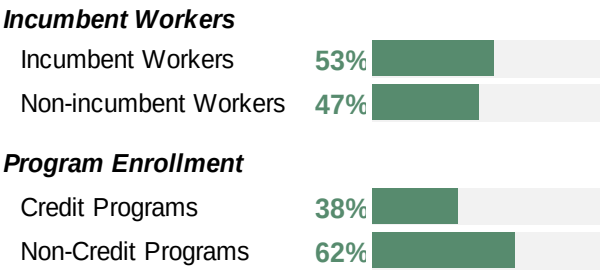
[1] OSHA 10 is not counted as an industry recognized credential for TAACCCT outcome reporting purposes.

Grant staff developed new training programs for employer partners who hoped to upskill their incumbent workers. Often, these programs were developed in collaboration with partners and subject matter experts, to ensure that the curricula aligned with industry needs.

Student Population Served

Throughout the program, Scale-Up SELA students tended to be African American and male. A majority of Scale-Up SELA students were enrolled in non-credit programs, and over half of all Scale-Up SELA students were incumbent workers.

Figure 1, Scale-Up SELA Students



Evaluation Design

Thomas P. Miller & Associates, LLC (TPMA) served as the independent, third-party evaluator for the Scale-Up SELA program. The evaluation's primary purpose was to assess the planning, implementation, and effectiveness of the intervention. The evaluation itself consisted of two components, implementation and outcomes studies.

Implementation Evaluation Design

The Implementation Evaluation began January 2015 and continued through March 2018 to document program progress, monitor program outcomes, and provide recommendations for continuous improvement of program operations. The Implementation Evaluation focused on a series of research questions to explore the development and implementation of the Scale-Up SELA program, employing principles of a utilization-focused framework.[2] This evaluation was primarily qualitative and used a general inductive thematic approach[3] to analyze the data including program update calls, interviews and focus groups, and document review.

Table 2. Implementation Evaluation Research Questions

Implementation Evaluation Research Questions
1. How was the particular curriculum selected, used, and/or created?
2. How were programs and program designs improved using grant funds? What delivery methods were offered? What was the program administrative structure? What support services and other services were offered?
3. How were assessment tools used to select participants for the grant program? Was an in-depth assessment of participants' abilities, skills, and interests conducted to select participants into the grant program? What assessment tools and processes were used? Who conducted the assessment? How were the assessment results used? Were the assessment results useful in determining the appropriate program and course sequence for participants? Was career guidance provided, and if so, through what methods?

[2] Patton, M.Q. *Essentials of Utilization-focused Evaluation*. Thousand Oaks, CA. SAGE Publications, Inc., 2012.
[3] Thomas, D.R. (2006). *A general inductive approach for analyzing qualitative evaluation data*. American Journal of Evaluation, 27, 237-245.

4. What contributions did each of the partners (i.e., employers, workforce system, other training providers and educators, philanthropic organizations, and others as applicable) make in terms of: (1) program design, (2) curriculum development, (3) recruitment, (4) training, (5) placement, (6) program management, (7) leveraging of resources, and (8) commitment to program sustainability? What factors contributed to partners' involvement or lack of involvement in the program? Which contributions from partners were most critical to the success of the grant program? Which contributions had less of an impact?
5. What program outputs have been generated to date? What barriers hindered output achievement? What factors unexpectedly improved output achievement? Why?
6. How satisfied were program partners, staff, and participants with the program? Why?
7. What have been the successes and obstacles to program performance?
8. How can program processes, tools, and/or systems be modified to improve performance?
9. How can the program expand or enhance institutional capacity? What are the most promising programmatic components to use institution-wide? Why?

Outcomes Evaluation Design

The purpose of the Outcomes Evaluation was to examine specific observed completion and employment results that were associated with participation in the Scale-Up SELA program and to understand patterns in credential completion and post-program wages of Scale-Up SELA students. The analysis examines outcomes for grant-funded program participants (treatment group), as well as for a retrospective comparison group of Delgado Community College students who were enrolled in the equivalent programs prior to the grant-funded program. The Outcomes Evaluation examined the frequencies and percentages of key outcomes both within Scale-Up SELA program participants and between program participants and a retrospective comparison group of Delgado Community College students in similar programs. The outcomes analysis for this evaluation was not able to isolate all of the effects of differences in participant characteristics, therefore any inferences made from the statistical results should be taken with caution.

The outcomes analysis used data collected during the grant period by Delgado Community College through the G*STARS database. Historical data was provided through Delgado's administrative data systems. Wage data was not available for all Scale-Up SELA students through either the State of Louisiana nor the National Evaluation, though both options were explored. As a result, the analysis only included wage data for participants who were incumbent workers.

Table 3. Outcomes Evaluation Research Questions

Outcomes Evaluation Research Questions
1. To what extent do Scale-Up SELA students earn credits? Do Scale-Up SELA students demonstrate increased probability of earning credits than do equivalent comparison group members in similar programs who do not receive the intervention?
2. To what extent do Scale-Up SELA students complete the program? To what extent do Scale-Up SELA students earn credentials? Do Scale-Up SELA students demonstrate increased probability of earning credentials or greater numbers of credentials than do comparison group members in similar programs who did not receive the intervention?
3. Do Scale-Up SELA students who were employed upon program entry demonstrate improved employment or wage outcomes after the program?

Implementation Findings

Program Development and Fidelity of Implementation

Core Plus and Tech 101 courses were enhanced for both non-credit and credit students through the Scale-Up SELA program; these enhancements included the addition of necessary safety credentials, such as OSHA 10[4]. These courses were paired with concentrated job readiness and placement services and incorporated hybrid learning and team teaching. Scale-Up SELA students who did not enroll in Core Plus or Tech 101 benefited from new equipment in their labs, embedded industry recognized credentials, the development of new courses, and the same job readiness and placement services as other Scale-Up SELA students.

Throughout implementation, the program continued to be implemented with fidelity. While one component, hybrid courses, was implemented with less success than grant staff had originally anticipated, hybrid learning opportunities were still available to Scale-Up SELA students. Grant staff reported that the hybrid format for Tech 101 was the first technical training course offered in an online format which increased the institution's capacity for hybrid formats for future technical training courses.

Student Support Services

Throughout the Scale-Up SELA program, grant staff worked to recruit, retain, and provide job placement supports to students. Key findings related to student support services included:

Recruitment:

- Staff partnered with five local opportunity centers to recruit additional students for Core Plus.
- Staff reported that the most successful recruitment approach were word of mouth from previous students and key partners, and community outreach efforts.
- Grant staff worked throughout the grant with the college's Marketing Department to develop a marketing plan that focused on highlighting the programming available through the Scale-Up SELA program.
- As the grant moved into PY 4, grant staff reported that their recruitment approach changed to accommodate the timeline for the end of the grant.

Retention:

- The use of Individual Service Strategy (ISS) allowed Student Navigators to engage with Scale-Up SELA students early after enrollment in the program.
- Student Navigators provided intrusive advisement, a case management-style of support, to Scale-Up SELA students.
- Navigators reported that the supports offered that were the most utilized were resume review, job application assistance, and "just talking, and being there to listen to them."

Placement:

- The Career Developer devoted a significant amount of time to developing and maintaining relationships with employers to identify and secure job opportunities for Scale-Up SELA program completers.
- Job Readiness Workshops introduced students to important skills and knowledge areas needed to successfully secure and retain employment.

[4] OSHA 10 is not counted as an industry recognized credential for TAACCCT outcome reporting purposes.

- Staff and students both reported that job readiness services were a key factor in student placement.
- Scale-Up SELA job fairs were well received by both employers and students.

Key Partnerships

One of the strengths of the Scale-Up SELA program was the engagement of, and contributions from, industry and community partners. Throughout the grant period, grant staff worked to leverage existing relationships and forge new partnerships. Scale-Up SELA partners generally fell into four main categories: Advisory Board members, the workforce system, employers, and education and training providers.

- Advisory Board members' feedback was utilized to make curriculum revisions, including incorporating OSHA 30 in the electrical program and refining the welding program.
- Leveraging opportunities with the workforce system through partnerships with Job1 and the local Workforce Development Board increased the reach of the Scale-Up SELA grant in the community.
- Employer partnership were a key factor in the success of the Scale-Up SELA program, and employer were engaged in a variety of ways throughout the program, including attending job fairs and mock interviews, hiring students, and partnering to develop customized training programs for incumbent workers.
- Partnering with local educational institutions to provide Core in other locations and through other programs allowed Scale-Up SELA programming to meet students where they were, rather than requiring all students to come to Delgado's campuses to receive their training.

Accelerators to Output Achievement

Grant staff leveraged a number of strengths, positioning the Scale-Up SELA program for ongoing success. These notable strengths included:

- Grant staff strategically and intentionally engaged employers and workforce partners to fully leverage the Scale-Up SELA grant.
- Students' satisfaction with the Scale-Up SELA program resulted in students spreading the word about the program to their peers, which increased recruitment for the program.
- Grant staff, instructors, students, and college leadership all reported that the team teaching approach allowed students to persist in the program.
- Job readiness supports provided to students positioned students well to begin their job searches.

Barriers that Hindered Output Achievement

All grant funded programs experience challenges and changes to plans, and the Scale-Up SELA program was no exception. Grant staff encountered and overcame barriers, including:

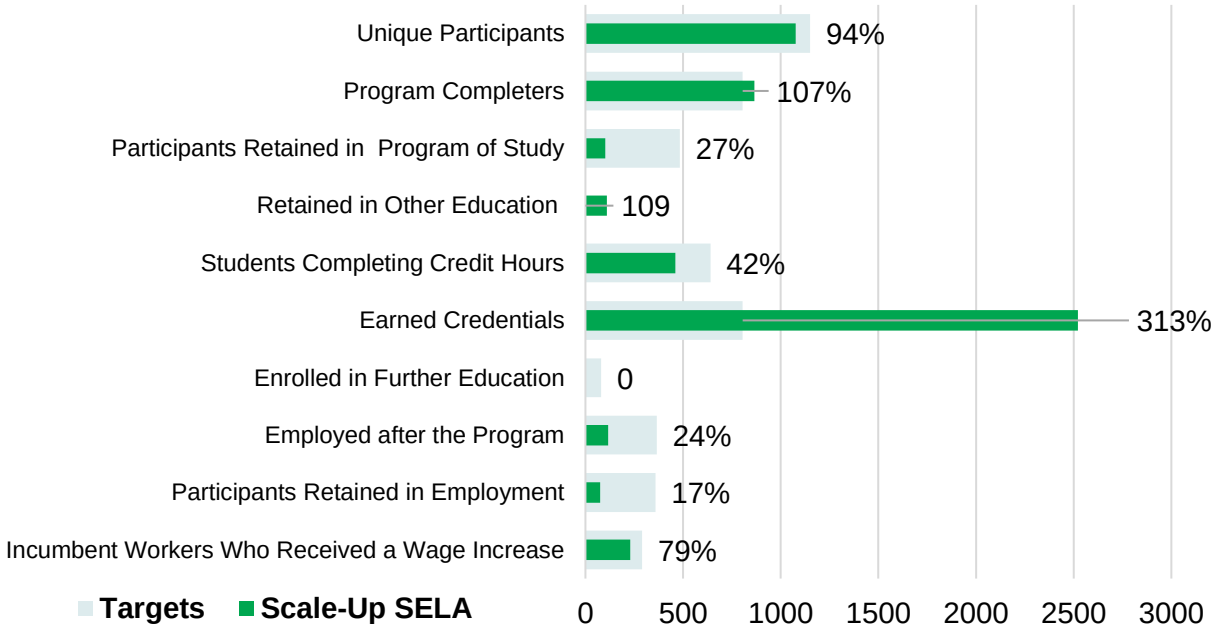
- The grant definitions of a completer for the TAACCCT grant limited grant outcomes related to employment
- Grant staff reported that external articulation agreements did not progress in the ways that they had hoped.
- Students' transportation barriers generally limited the participants of the program to students who either had reliable transportation or who lived close to campus.
- Student follow-up and intrusive advisement were challenging tasks for grant staff due to the size of the caseload.

Participant Impacts and Outcomes

TAACCCT Outcomes[5]

The Scale-Up SELA program had a goal of serving 1,150 unique participants and 805 program completers throughout the grant period. The Scale-Up SELA grant team nearly met the number of participants served and exceeded the number of program completers. Additionally, 2,521 credentials, certificates, and degrees were awarded to program completers, significantly exceeding the goal of 805. The Scale-Up SELA program did not meet outcomes related to employment; however, grant staff reported that employment was often verified by students through follow up calls, and students were not easy to connect with after the left the program. Additionally, wage data was not available to verify employment or wage data.

Figure 2. TAACCCT Output Achievement



[5] This data was provided to the Evaluation Team on September 20, 2018. However, grant staff continued follow up efforts with students and may report different final outcomes in their last APR, as they were able to update their data until September 30, 2018.

Credential Attainment Findings[6]

- 83.8% of Scale-Up SELA students earned a credential and students earned an average of 2.5 credentials.
- Students in the Scale-Up SELA program were significantly more likely to earn a credential (83.8%) than students in similar programs that were not part of the grant-funded program (57.1%).[7]

Table 4. Credential Earning Amongst Scale-Up SELA Students

	Credit		Non-Credit	
	% Earned at least one	Average # Earned	% Earned at least one	Average # Earned
Tech 101 Only/Core Plus Only	76.0%	1.9	81.1%	1.6
Electrical	87.2%	3.4	95.4%	2.9
Industrial Maintenance	85.0%	2.3	76.3%	2.2
Precision Machining	53.8%	0.9	N/A	N/A
Pipefitting	N/A	N/A	98.6%	3.2
Welding	76.6%	2.7	86.2%	3.0
Total	**81.2%**	**2.6**	**85.4%**	**2.4**

Program Completion Findings

- Overall, 850 students (79.1%) completed a grant-funded Scale-Up SELA program.
- Incumbent workers and non-incumbent workers completed Scale-Up SELA programs at similar rates.[8]
- In total, 84.7% of Scale-Up SELA students in credit bearing courses earned at least one credit while participating in the program.
- The average number of credits earned per student varied by program type and whether a student was an incumbent worker.

Table 5. Percentage of Scale-Up SELA Students Completing a Grant-funded Program

	Credit	Non-Credit
Tech 101 Only/Core Plus Only	74.8%	76.0%
Electrical	86.3%	90.8%
Industrial Maintenance	85.0%	54.8%
Pipefitting	n/a	98.6%
Precision Machining	53.8%	n/a
Welding	76.6%	85.4%
Total	**80.9%**	**78.1%**

[6] Data for the Outcomes Evaluation was provided to the Evaluation Team on August 17, 2018. While grant staff continued to update their data files until September 30, 2018, all data used in the Outcomes Evaluation is the subset of data that was finalized as of August 17.
[7] X^2= 175.1, df= 1, p< .001
[8] Incumbent workers 79.6% completed, Non-incumbent workers 79.9% completed

Employment and Wages Findings

- A fifth of non-credit students who did not have jobs when they enrolled in Scale-Up SELA entered the workforce after completing the program (20.6%).
- The average wage increases for incumbent workers who completed a Scale-Up SELA program was $2.90 per hour.

Table 6. Average Hourly Wage Increase Reported by Incumbent Workers in Scale-Up SELA Programs

	Average Hourly Wage Increase		
	Credit (N=82)	Non-Credit (N= 79)	Total
Full-time employed (N=119)	$2.99	$2.72	**$2.86**
Part-time employed (N=33)	$2.97	$3.74	**$3.30**
Total (N=161)	**$2.99**	**$2.81**	**$2.90**

Limitations

- Because the Evaluation Team could not isolate all of the effects of Delgado Community College through this outcomes analysis design, the Evaluation Team *cannot make claims* that the program *alone* contributed to the outcomes reported for students.[9] Any inferences made from the statistical results should be taken with caution.
- Data on the key outcomes of program completion, employment, and wage were not collected for the comparison group. Therefore, only outcomes analyses for treatment group participants were able to be calculated.
- The wage variable was only available for the treatment group but was almost entirely missing from the comparison group. This information was only gathered for incumbent workers, and only information on raises were recorded without their negative counterparts. Tt was only possible to complete descriptive analyses on wage for incumbent workers who participated in the program.
- The comparison group sample only included 89 students in non-credit programs. This may be due in part to the grant-funded program focusing on increasing opportunities for non-credit courses through the college. Having a low number of comparison group members in this cell could limit the power of findings about the outcomes of students in non-credit programs.
- Historical effects occur when some alternative event or innovation happens concurrently with program implementation. This event might have some influence on the outcome variables, though the change is incorrectly attributed to the intervention. Since there was no external comparison group that is experiencing the counterfactual condition at the same time, the Evaluation Team cannot rule out the possibility that historical effects are influencing the outcomes of interest.

[9] Gertler, P.J., Martinez, S. Premand, P., Rawlings, L.B. & Vermeersch,, C.M.J. (2011). *Impact Evaluation in Practice.* Washington DC: The International Bank for Reconstruction and Development/ The World Bank.

Conclusions

Scale-Up SELA grant staff were successful in enrolling students into training programs and supporting them towards credential attainment. On average, Scale-Up SELA completers earned 2.5 recognized credentials. Students reported that the supports that they received in the Scale-Up SELA program, including team teaching, advising supports, and job readiness workshops all positioned them for success both during their time in their programs of study and as they prepared to seek employment. Incumbent workers received increases in their hourly wages after completing their training with Scale-Up SELA.

The Scale-Up SELA grant staff successfully implemented programs that achieved these outcomes through garnering support from college leadership, aligning their curricula to industry standards, purchasing equipment, and providing students with intentional supports and job readiness training.

Recommendations for Replication

For institutions considering replicating the Scale-Up SELA program, the following recommendations were offered by grant staff:

- Grant staff and college leadership encouraged future institutions to evaluate their internal capacity to support a prospective grant before submitting a proposal for funding.
- Maintain strong data-tracking procedures to accurately reflect grant activities and progress.
- Staff also recommended cross-training to lessen the effect of staff turnover and ensure resiliency to the grant team and program during periods of transition.
- Staff also recommended that additional time for implementing such a program, including both a planning year, and more time at the end of the program to complete additional follow-up with students could yield a smoother process for future implementers.

Future Research

A review of evaluation findings and limitations suggests several avenues for future research. The Evaluation Team has identified three areas where further research may yield grater insight into the effects of the Scale-Up SELA:

- The extent to which wage increases were seen across all participants;
- The extent to which a longer post-program observational window would reveal impacts of greater magnitude;
- Exploring the types of employment earned by students and the extent to which wages vary by industry.

TABLE OF CONTENTS

Executive Summary 2
Introduction 12
Evaluation Methodology 13
Intervention Overview 20
Strategic Alignment 22
Staffing and Turnover 24
Key Implementation Evaluation Findings 25
Program Implementation 25
Student Support Services 29
Partner Engagement 32
Program Output Achievement 35
Key Outcomes Findings 38
Scale-Up SELA Student Demographic Data 38
Credential Attainment 39
Program Completion 41
Employment and Wages 43
Looking Forward 44
Sustainability 44
Stakeholder Recommendations for Replication 45
Conclusion 45
Appendices 47

INTRODUCTION

Purpose and Background

In 2014, Delgado Community College (Delgado) in New Orleans, Louisiana, received a grant of $2,500,000 through the U.S. Department of Labor (USDOL) Trade Adjustment Assistance Community College and Career Training (TAACCCT) program to fund Scale-Up Southeast Louisiana (Scale-Up SELA).

The purpose of Scale-Up SELA was to deliver training to meet the needs of TAA-eligible workers, veterans, and other non-traditional learners in Southeast Louisiana. Ultimately, Scale-Up SELA sought to increase job placements for TAA-eligible and non-traditional learners residing in the ten parishes that define Southeast Louisiana by training participants for high-wage, high-skill employment opportunities available in rapidly growing regional industry sectors of advanced manufacturing.

As part of the grant requirements, grant staff procured an independent contractor, Thomas P. Miller & Associates (TPMA) to conduct an objective evaluation of Scale-Up SELA. This evaluation provided Scale-Up SELA, its partners, its funders, and other stakeholders with critical information regarding the progress and effectiveness of implemented programs, institutional capacity, and participant outcomes. The evaluation tracked program implementation through March 31, 2018[10] and presented this final report on the program in September 2018.

Report Purpose and Organization

This Scale-Up SELA external evaluation assessed how the well the program implemented its components, examined its implementation and contextual challenges, documented mid-course corrections and decisions, and determined student outcomes attributable to the Scale-Up SELA program. This is the second and final summative evaluation report for the Scale-Up SELA TAACCCT-funded program. It builds on and references the interim report submitted to USDOL in 2016, which provided a detailed analysis of the Scale-Up SELA program implementation from its initial stages to full implementation.

This first section of the report presents the evaluation design detailed in the evaluation design submitted to USDOL in 2015, followed by a summary of the methodology and research questions for the implementation and Outcomes Evaluation components. The findings from the Implementation Evaluation precede the outcomes findings, as this report focuses on how the Scale-Up SELA program was implemented, and then assesses how the program fared, in terms of student outcomes. The implementation findings retrospectively help illustrate the actions and contexts that lead up to the outcomes. The final sections look beyond Scale-Up SELA's funding period and describe sustainability forecasts based on discussions with program staff and present recommendations for other institutions interested in pursuing a similar program design and USDOL stakeholders.

[10] On May 10, 2016 USDOL Employment and Training Administration provided all Round 4 grantees the opportunity to extend implementation through March 31, 2018. The *Scale-Up SELA* program staff has decided to follow the timeline offered by the extension.

EVALUATION METHODOLOGY

Implementation Methodology

The Implementation Evaluation began August 2015 and continued through March 2018[11] to document program progress, to monitor program outcomes, and to provide recommendations for continuous improvement of program operations. The Evaluation Team conducted a formative and summative evaluation, primarily focused on the development of the Scale-Up SELA training programs and on the contextual factors influencing implementation. The Implementation Evaluation was intended to be a key element in learning lessons along the way to enhance program implementation and results in real-time. Evaluation feedback was provided through analysis of the following primary themes:

- Progress toward achieving certain program outcomes or milestones
- Program accelerators, barriers, and environmental factors
- How strategies or activities not successfully implemented could be adapted or modified to the realities of the circumstances surrounding the project
- Context for sustaining certain project activities

To gather information on the themes above, the Evaluation Team relied on first-person accounts of grant experiences gathered via conference calls, phone and in-person interviews, and program document reviews:

- Monthly (in 2015 and 2016) and quarterly (in 2017 and 2018) implementation update calls with the Project Manager and other key grant staff'
- In-person and phone interviews with Scale-Up SELA staff and instructors; college leadership, staff, and faculty, and participants during site visits in 2016 and 2017; and
- Scale-Up SELA documents, including quarterly program reports, and Scale-Up SELA outcomes analysis updates.

The Implementation Evaluation allowed the Evaluation Team, grant staff, and Scale-Up SELA stakeholders to better understand the program's core activities and descriptively evaluate how the operations of Scale-Up SELA functioned. The evaluation placed the outcomes of the intervention into context with the implementation process and examined whether the program was implemented as designed. This allowed the Evaluation Team to uncover any potential threats to the validity of the evaluation and helped program staff understand how the process might be modified to produce greater results.

Implementation Research Questions

The following set of research questions guided the Implementation Evaluation and provided a normative basis for the evaluation[12].

1. How was the particular curriculum selected, used, and/or created?
2. How were programs and program designs improved or expanded using grant funds?
    a. What delivery methods were offered?
    b. What was the program administrative structure?
    c. What support services and other services were offered?
3. How were assessment tools used to select participants for the grant program?

[11] Scale-Up SELA grant implementation took place up to March 30, 2018. The period of April 1, 2018 through September 30, 2018 was additional time for evaluation analysis and reporting.

[12] Research Questions 1-4 were required by USDOL. Research Questions 5-9 were added by the Evaluation Team.

   a. Was an in-depth assessment of participants' abilities, skills, and interests conducted to select participants into the grant program?
   b. What assessment tools and processes were used?
   c. Who conducted the assessment?
   d. How were the assessment results used?
   e. Were the assessment results useful in determining the appropriate program and course sequence for participants?
   f. Was career guidance provided, and if so, through what methods?
4. What contributions did each of the partners (i.e., employers, workforce system, other training providers and educators, philanthropic organizations, and others as applicable) make in terms of: (1) program design, (2) curriculum development, (3) recruitment, (4) training, (5) placement, (6) program management, (7) leveraging of resources, and (8) commitment to program sustainability?
   a. What factors contributed to partners' involvement or lack of involvement in the program?
   b. Which contributions from partners were most critical to the success of the grant program?
   c. Which contributions from partners had less of an impact?
5. What program outputs have been generated to date?
   a. What barriers hindered output achievement? Why?
   b. What factors unexpectedly improved output achievement? Why?
6. How satisfied were program partners, staff, and participants with the program? Why?
7. What have been successes and obstacles to program performance?
8. How can program processes, tools, and/or systems be modified to improve performance?
9. How can the program expand or enhance institutional capacity?
   a. What are the most promising programmatic components to use institution–wide? Why?

Data Sources

The Evaluation Team collected data from the following sources to address the research questions for the Implementation Evaluation:

Table 7. Data Sources

Primary Data Source	Description
Implementation Update Calls	The Evaluation Team gathered qualitative data tracking program implementation progress through monthly calls in 2015 and 2016 and quarterly calls in 2017 and 2018.
Program Documents	The Evaluation Team reviewed reports developed by the Program Director for USDOL submission.
Program Site Visits (program staff and instructor interviews, partner interviews, and participant group interviews)	The Evaluation Team gathered qualitative data during two site visits to the colleges in April of 2016 and April of 2017. During these visits, the Evaluation Team conducted interviews with program staff, college level administrators, and instructors to learn their perceptions of the program's implementation process. They also conducted group interviews with participants to learn their perceptions of the program components. As available, the Evaluation Team conducted interviews with employer partners, and representatives from the Workforce Development Board. All of the protocols used during these site visits can be found in Appendix A.

Analysis Methods

To conduct a descriptive analysis of program implementation and the contextual factors influencing implementation, the qualitative data generated from interviews was placed into a matrix that listed responses by interview question (row) and program role (column). Program roles included grant staff, grant instructors, college leadership and staff, and students. Based on participant responses, key words were identified and listed in the appropriate column and row. Key words were then grouped across roles to identify commonalities and differences. Further, responses associated with key words were identified as positive, negative, or neutral to assist in identifying perceived successes and challenges.

Once groupings were identified based on review of interview data, the Evaluation Team augmented the information with a review of (1) notes taken during monthly (later quarterly) implementation update calls; (2) detailed notes taken during site visits (conducted during April 2016 and 2017), including direct quotes; (3) Scale-Up SELA documents, including quarterly reports; and (4) the Team's extensive experience with technical training programs and the body of evaluation knowledge built through their work. Further, these sources were used to develop and refine interview and focus group questions for each site visit, including areas that might need further exploration. Guidance about what was important came from the grant narrative, research questions, and calls that had occurred throughout the grant period. The following descriptive categories are used in the report:

- *Progress* – Documentable steps taken to advance or achieve grant outcomes, deliverables, milestones, and/or goals**;**
- *Accelerators/Strengths of Progress* – Documentable achievements along with contextual factors that enhanced grant progress and improved the ability of grant staff to carry out grant initiatives, focused on internal factors (program design, modification, implementation, and application);
- *Barriers/Challenges to Progress* – Documentable shortcomings in achievements, along with contextual factors that hindered grant progress and delayed or prevented grant staff from carrying out grant initiatives;
- *Recommendations* – Opportunities the Evaluation Team identified for improving progress toward grant outcomes (in Interim Reports), and recommendations for other educational institutions looking to start similar programs; and
- *Sustainability* – Components of the program that are planned to continue once funding ends.

To strengthen the accuracy and credibility of implementation findings, the Evaluation Team relied on triangulation, including reviewing outcomes data and identifying the ways in which it corroborated or conflicted with information from the Implementation Evaluation, as well as collaborative inquiry. By comparing findings based on different data sources and using approaches that incorporated both evidence and negative evidence, the Evaluation Team created a robust and dynamic depiction of implementation. By presenting findings to Scale-Up SELA stakeholders for elaboration, corroboration, and modification, the Evaluation Team confirmed and updated analyses. Additionally, by sharing findings with intended users as they emerged, the Evaluation Team built a collaborative relationship with stakeholders that encouraged higher quality first-person data and increased the likelihood the evaluation could produce timely, user-relevant findings.

Reporting of Results

Data were reviewed, interpreted, and included in the site visit rapid reports developed after each site visit (April 2016 and 2017), the interim report in 2016 (PY 2), and this final report, finalized by September 30, 2018. The reports contain the results of the analysis and recommendations for program enhancements (interim report only), and lessons learned. An in-depth review of these reports was conducted by the Program Director for member checking, factual verification, and elaboration on findings and recommendations. Subsequently, the reports were submitted to the USDOL by the Scale-Up SELA Program Director. Quarterly reports were developed throughout the implementation period, providing programmatic updates and data on specific concepts based on quarterly call notes.

Limitations

Limitations for the Implementation Evaluation included the following::

Limited Data Sources – When possible, the Evaluation Team used data triangulation to verify narratives and other information shared by key stakeholders. Triangulating data from multiple sources, such as comparing findings among stakeholder interviews with outputs and outcomes data, creates more credible evaluation results. However, the Evaluation Team often was faced with a limited number of data sources. The Program Director and grant staff provided a majority of information to the Evaluation Team, and the evaluators were unable to triangulate some of this information due to a lack of other sources, including missing or incomplete data.

Partial and Biased Findings – Qualitative and perceptual research methods offer good insights, but are, by nature, partial and biased. For this evaluation, perceptual information (data gathered through focus groups and interviews with staff, stakeholders, and participants) was the primary mechanism by which information was obtained to gauge successes and challenges of the project. The Evaluation Team was faced with a limited number of additional data sources (quantitative and qualitative) to support these findings. To attempt to address this limitation, the Evaluation Team used data triangulation whenever possible, including interviewing multiple stakeholders.

Respondent Order Effect – During site visits, the Evaluation Team conducted group interviews for students within the chosen classes. At these group interviews, participants more interested in sharing their opinions of the program may have spoken up at a greater rate than other students. This may have created a pecking order bias by participants self-selecting their response order (i.e. certain participants go first, and others go last). Receiving a range of feedback from participants, from positive to critical, supports the notion that a spectrum of student experiences was captured; however, it is possible that bias related to the participant response ordering was introduced into the evaluation.

Researcher Extrapolation – Analysis conducted with an interpretive analytical framework suffers from the threat that researcher extrapolation and interpretation may go too far beyond what is present in, and supported by, data.[13] Indeed, the recommendations provided in this report are based on a combination of what was learned and supported by data and the experiences and findings of the evaluators' previous experience designing, implementing, and evaluating various workforce development programs.

[13] Guest, Greg, MacQueen, K.M., and Namey, E.E. *Applied Thematic Analysis*. Thousand Oaks, CA. SAGE Publications, Inc., 2011.

Outcomes Methodology

The Outcomes Evaluation observed credit earning, completion, credential earning, and employment effects that are associated with participation in Scale-Up SELA. The outcomes analysis took place in August and September of 2018[14] using data collected during the grant period by Delgado Community College through the G*STARS database. The analysis examines outcomes for grant-funded program participants (treatment group), as well as for a retrospective comparison group of Delgado Community College students who were enrolled in the equivalent programs prior to the grant-funded program. Following the final data transfer, data was cleaned, coded, and by the Evaluation Team. A full description of the data cleaning and coding process is available in Appendix B.

Research Questions

Research questions were changed based on the data that was available at the time of analysis. Here are the questions we answered in this evaluation.

1. To what extent do Scale-Up SELA students earn credits?
    a. Do Scale-Up SELA students demonstrate increased probability of earning credits than do equivalent comparison group members in similar programs who do not receive the intervention?
2. To what extent do Scale-Up SELA students complete the program?
    a. To what extent do Scale-Up SELA students earn credentials?
    b. Do Scale-Up SELA students demonstrate increased probability of earning credentials or greater numbers of credentials than do comparison group members in similar programs who did not receive the intervention?
3. Do Scale-Up SELA students who were employed upon program entry demonstrate improved employment or wage outcomes after the program?

Data Sources

Grant staff at Delgado Community College collected student data and entered the data into the G*STARS database. The Evaluation Team used a specific process for collecting the final dataset from the grant staff. First, the Evaluation Team requested a representative test pull of program data for students enrolled in Scale-Up SELA to examine what variables would be needed for the final dataset. Grant staff at Delgado securely transmitted the de-identified dataset to the Evaluation Team, according to the data sharing agreement. Following the final data transfer, data was cleaned and coded by the Evaluation Team.

Wage data was not available for Scale-Up SELA participants, as the Louisiana Workforce Commission would not provide access to wage data for any TAACCCT participants in any of the programs at any of the Louisiana-based community college grantees. During the course of the grant period, the Scale-Up SELA program was selected to participate in the TAACCCT Round 4 National Evaluation by the National Evaluators, Abt Associates. As a result of participation in the National Evaluation, Abt Associates brokered MOUs to provide grantees and their third party evaluators with wage data for program participants. However, while this data sharing process was undertaken, the final data sets were not provided back to the grantees or third party evaluators in time for inclusion in this final report. As such, the Scale-Up SELA final report does not include any wage data analysis or findings for all participants.

[14] Scale-Up SELA grant implementation took place up to March 30, 2018. The period of April 1, 2018 through September 30, 2018 was additional time for evaluation analysis and reporting.

Analysis Methods

For this analysis Evaluation Team completed an Outcomes Evaluation that examined frequencies and percentages of key outcomes both within Scale-Up SELA program participants and between program participants and a retrospective comparison group of Delgado Community College students in similar programs. However, because of a low N size in the comparison group for non-credit courses, and no information on incumbent worker status in the comparison group, advanced statistical matching techniques were not used. Additional information about the comparison group design is available in Appendix C.

Descriptive data was separated by categories (i.e. disaggregated) as appropriate, including disaggregation by program. These results allowed for further understanding of the types of individuals who participated in the Scale-Up SELA program, and potential within-group and between-group differences in outcomes for program participants.

Independent sample t-tests were computed to test for significant difference in means between students in non-credit courses and those in for-credit courses and for difference in means between students in the treatment group and those in the comparison group on number of credentials earned and number of credits earned. Effect sizes were also computed, which helped substantiate any statistically significant results. Effect sizes were useful for understanding if the statistically significant results are practically relevant. They also serve as an additional safeguard to fallacious *p*-values insofar as they are indifferent to significances that may result from sample size.

Two-by-two chi-square tests (χ^2) were performed to compare the frequency of the different outcomes, such as credential attainment and program completion between the treatment and comparison group. Chi-square tests were useful exploratory analyses to examine if there is a significant relationship between group membership (i.e., treatment or comparison group) and the five persistence outcomes.

Limitations

Differences in Data Collection Between Treatment and Comparison Groups – Data on the key outcomes of program completion, employment, and wage were not collected for the comparison group. Therefore, only outcomes analyses for treatment group participants were able to be calculated.

Low Data Quality for Wage Variable – The wage variable was only available for the treatment group but was almost entirely missing from the comparison group. This information was only gathered for incumbent workers, and only information on raises were recorded without their negative counterparts. Additionally, the data available was provided at the discretion of the student. Because of this, it was only possible to complete descriptive analyses on wage for incumbent workers who participated in the program.

Data Manipulation Error – The data provided by Delgado Community College consisted of separate files for the comparison and treatment groups and was separated by cohort year as well as whether they were enrolled in a for-credit or non-credit program. Additionally, there were some missing data within variables. The Evaluation Team merged all students into one set of comprehensive data for analysis. Though the Evaluation Team was careful to cleanly construct

variables of interest for the evaluation, this type of manual data manipulation can lead to data loss non-key variables or miss-categorization of individuals into null data categories.

Low Comparison Group Population in Non-Credit Programs – The comparison group sample only included 89 students in non-credit programs. This may be due in part to the grant-funded program focusing on increasing opportunities for non-credit courses through the college. Having a low number of comparison group members in this cell could limit the power of findings about the outcomes of students in non-credit programs. However, during the grant period, it was reported that the Scale-Up SELA program funded a majority of the non-credit programming that was offered, so while there was a low comparison group population, there may have been less non-credit programs offered, in the absence of a grant to supplement them.

Claims of Causality – Because the Evaluation Team could not isolate all of the effects of Delgado Community College through this outcomes analysis design, the Evaluation Team ***cannot make claims*** that the program ***alone*** contributed to the outcomes reported for students.[15] Any inferences made from the statistical results should be taken with caution.

Historical Effects – Historical effects occur when some alternative event or innovation happens concurrently with program implementation. This event might have some influence on the outcome variables, though the change is incorrectly attributed to the intervention. This is of particular concern because of the variability and influence that greater economic conditions have on the outcomes of interest (i.e., wages and program completion). The availability of jobs changes over time; what may look like a program impact (or absence of one) could be entirely or partly the result of changing conditions outside the program. Since there was no external comparison group that is experiencing the counterfactual condition at the same time, the Evaluation Team cannot rule out the possibility that historical effects are influencing the outcomes of interest.

[15] Gertler, P.J., Martinez, S. Premand, P., Rawlings, L.B. & Vermeersch,, C.M.J. (2011). *Impact Evaluation in Practice.* Washington DC: The International Bank for Reconstruction and Development/ The World Bank.

INTERVENTION OVERVIEW

Through the TAACCCT grant, the Scale-Up SELA grant staff developed and enhanced non-credit programs in Welding, Pipefitting, Electrical, and Industrial Maintenance, and credit programs in Electrical, Industrial Maintenance, Precision Machining, Process Instrumentation and Controls, and Welding. Scale-Up SELA enhanced most of these credit and non-credit programs through corresponding introductory courses (Core Plus or Tech 101). These introductory courses were an enhanced version of the previously existing introductory course, Core, and provided an overview of the specialties available through Scale-Up SELA, as well as necessary safety credentials, including OSHA 10[16] and NCCER Core. These courses were paired with concentrated job readiness and placement services and incorporated hybrid learning and team teaching. Additionally, programs were enhanced through new equipment, the embedding of industry recognized credentials, the development new courses within the fields of study, and recruitment support from Scale-Up SELA grant staff.

Table 8. Programs Impacted by the Grant

Non-Credit	Credit
Core Plus	Tech 101
Electrical	Electrical
Industrial Maintenance Mechanic	Industrial Maintenance
Pipefitting	Precision Machining
Welding	Process Instrumentation and Controls (PIC)
	Welding

Core Plus was offered at no-cost to students, while Tech 101 was not, as Tech 101 was part of the traditional credit-bearing course fee structure. Core Plus was aligned as the introductory course to several non-credit training programs, and it was also offered as a stand-alone program. Students had the opportunity to exit the Scale-Up SELA program with NCCER Core certification immediately upon completing the course or continue on into any of the aligned programs though which they continued to earn NCCER credentials related to their field of study. Core Plus was offered both on campus at Delgado and as a standalone program through a variety of partners at the locations of their training programs.

Grants staff, instructors, and employers all reported that the OSHA 10 card earned during Core Plus and Tech 101 provided students with a “good overview of safety,” which instructors reported was “so important on the job site.” Employers also reported that the NCCER credentials that students had the opportunity to earn through the program were “very relevant to local industry.” Another employer reported that the NCCER credentials were beneficial because the credentials told employers “where their skills were at before we’d even met them.” Students in the program noted that the NCCER credentials were important to employers and that they had seen job postings that required candidates to have obtained NCCER credentials.

[16] OSHA 10 is not counted as an industry recognized credential for TAACCCT outcome reporting purposes.

Figure 3. Scale-Up SELA Non-Credit Credentials

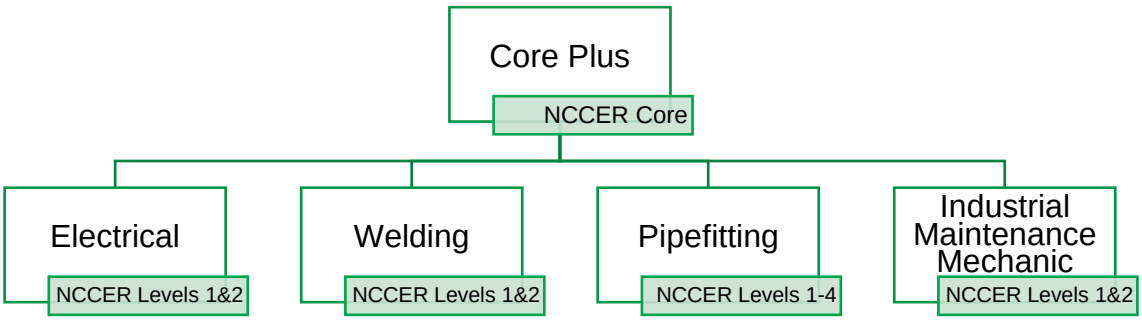
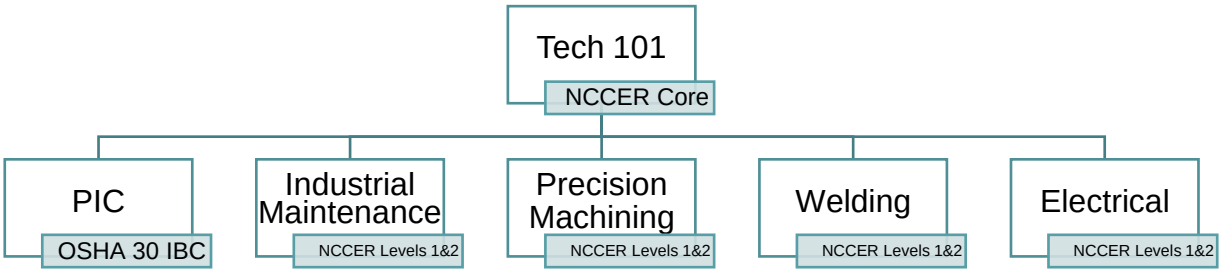


Figure 4. Scale-Up SELA For Credit Credentials



Once students enrolled in Scale-Up SELA courses at Delgado, grant staff offered students supports through an intrusive advising model, in which students received customized supports that aligned to their specific educational and career goals. While in classes, students benefitted from a team teaching approach that provided students who needed additional help in the classroom with the supports they needed. Grant staff helped to facilitate a PLA process, through which they provided assistance to students who completed non-credit courses to ensure that they received appropriate credits for their coursework.

As students prepared to seek employment near the end of their training programs, grant staff provided job preparedness supports that included resume help, mock interviews, job fairs, and assistance with job searches. Employers reported that students who completed the Scale-Up SELA program were well prepared for both their interviews and for the jobs that they were seeking.

Strategic Alignment

A required component for all TAACCCT grantees was to integrate USDOL's core elements for successful program development into the grantee's program concept and vision. Scale-Up SELA grant staff integrated all core elements into the program, however some elements were more successfully implemented than others. Throughout this report, the successes and challenges of implementing these core elements are discussed in greater detail.

Table 9. Evidence of Core Element Integration

Core Elements	Evidence
✓ 1. Evidence-Based Design	All five of the grant strategies incorporated into the program were evidence based.
✓ 2. Career Pathways	Scale-Up SELA's career pathways clearly articulated opportunities for continued education or exits to employment. Opportunities for contextualized learning were identified to assist adult learners who may have needed additional remedial supports, as were coaching and mentoring opportunities to ensure that the career pathway developed accommodated all types of learners. The pathway included articulation into further education, and industry recognized credentials relevant for employment.
✓ 3. Advanced Online and Technology-Enabled Learning	The Tech 101 course was developed and delivered as a hybrid pilot program. Additionally, interactive simulation and hands-on learning leveraged new technologies and equipment in the training courses.
✓ 4. Strategic Alignment with the Workforce System and Other Stakeholders	Scale-Up SELA staff leveraged strong relationships with the local WDB to provide training for their customers, and they collectively leveraged both Delgado's TAACCCT grant and the WDB's WIF grant to maximize the impact of both grants. They also partnered with five opportunity centers to train customers in Core Plus, before they returned to the Opportunity Center for employment services for their designated programs. These students also received employment services from grant staff, as needed.
✓ 5. Alignment with Previously Funded TAACCCT Projects	Delgado Community College was part of a Round 2 TAACCCT Consortium, *Retraining the Gulf Coast Workforce through IT Pathways*, and leveraged lessons learned and best practices from the previously funded grant at the college.
✓ 6. Sector Strategies and Employer Engagement	Scale-Up SELA engaged employers throughout the grant period in a variety of ways, and the program is aligned to the Louisiana Demand Driven Workforce Investment Plan for WIA and WPA, which identified advanced manufacturing as a top sector.

Grant Strategies in Action

The grant narrative outlined five strategies that were to be implemented by the Scale-Up SELA program. The table below identifies the ways in which the different strategies were implemented throughout the grant period. The color codes signify the extent to which the strategies were implemented with fidelity to the initial program plan. Green signifies that the component was implemented with fidelity, and yellow signifies that the strategy was implemented, but not with full fidelity to the plan. Further discussion on the implementation of these strategies is discussed throughout this report.

Table 9. Fidelity of Implementation of Grant Strategies

Grant Strategies	Scale-Up SELA Implementation
1. Develop and implement competency-based advanced manufacturing curricula.	**GREEN** Scale-Up SELA grant staff engaged their advisory committee on program design and implemented the curricula for grant programs.
2. Use of various technologies to advance online and technology-based learning.	**YELLOW** A 100% online course for Tech 101 was completed and piloted, however not utilized beyond the pilot. Instructors offered a hybrid version of Tech 101 thereafter but did not continue to offer a completely online format. Interactive simulations, including a guideWeld® welding simulator in the welding lab, were embedded into lab components.
3. Utilize the I-BEST model for delivery of instruction.	**GREEN** Contextualized learning through team teaching was fully implemented in the Scale-Up SELA program.
4. Develop a continuum of portable, stackable, latticed credentials with multiple entry and exit points, recognizing prior learning and creating articulation to a four-year institution.	**GREEN** The credential pathway for Scale-Up SELA recognized prior learning through challenge exams, provided for multiple entry and exit points, students were able to earn portable and stackable credentials, and articulated credits into further educational opportunities.
5. Strategic Alignment with Workforce Systems and Other Stakeholders.	**GREEN** Scale-Up SELA was leveraged collectively with the local WDB's WIF grant, a partnership was developed with the American Job Center (Job1) for training for airport employees, and employers were extensively involved in aligning the program to industry needs.

Staffing and Turnover

Staffing Structure

To effectively manage the Scale-Up SELA program's many components, clearly defined roles and responsibilities for grant staff were established. Grant staff filled the following major roles:

- **Program Director:** held ultimate responsibility for ensuring that grant funded activities were completed in a timely and effective manner. The Program Director worked to build relationships and general awareness of the *Scale-Up SELA* program, and actively sought opportunities to partner or otherwise enhance the impact of grant funding.
- **Program Coordinator**: managed day-to-day activities within the *Scale-Up SELA* program, offered support to other grant-funded staff. The Program Coordinator also played a significant role in recruitment and awareness efforts, supplemented existing efforts and provided administrative support.
- **Data Retention Specialist**: responsible for management of the *Scale-Up SELA* database, which included ensuring that all necessary program, student, and employer data was stored securely. The Data Retention Specialist was also responsible for cleaning and preparing data for internal and external reporting.
- **Student Navigators**: assisted students with enrollment and goal setting through the Individual Service Strategy and Individual Service Plan. The Student Navigators provided ongoing case management, ensuring students had the resources that they needed to successfully complete the program and transition into further education or employment.
- **Career Developer:** prepared students to enter the workforce through job readiness workshops, individualized training, and career fairs. The Career Developer advocated for students by developing relationships with local employers, and connected job-seeking students with these contacts.
- **Team Teachers**: co-facilitated teaching class content, supported the instructors, offered one-on-one skills training in areas such as reading, writing, and math.
- **Advanced Manufacturing Instructors**: technical experts who led classroom and lab program instruction in their subjects of expertise.

Staff Turnover

In the winter of 2016 the Scale-Up SELA grant team experienced transition when the Project Director transitioned off the project to serve as the Interim Director of Community and Economic Development at Delgado. The Program Coordinator stepped in to serve as the Project Director, and the Career Developer became Program Coordinator and continued Career Developer duties.

In Program Year 2, one of the two Career Navigators left the college. The Scale-Up SELA team reported that in the interim, staff filled the required duties of the Navigator, such as conducting the intake process and managing the caseload, until a new Career Navigator was hired. Finally, the grant team hired an Administrative Assistant to assist with day-to-day program functioning.

Grant staff reported that the transitions in staffing were "tough, because so much was happening at once." The Program Coordinator reported that as she was acclimating to her new responsibilities of the role of Program Director that "things were still moving forward at a rapid pace". However, it was also noted that the former Program Director was still employed at the college and was able to assist in transition the knowledge to the Scale-Up SELA grant staff.

KEY IMPLEMENTATION EVALUATION FINDINGS

Program Implementation | Research Questions 1, 2

Scale-Up SELA programs were offered through both non-credit training and credit-bearing courses. The Scale-Up SELA program primarily reached students through the introductory courses for technical training on both the non-credit and credit sides of the college – Core Plus and Tech 101. Core Plus served non-credit students, and Tech 101 was part of the pathway for students on the credit side of the college. These enhanced programs, Core Plus and Tech 101, were designed to introduce students to the trade program of their interest and give them the opportunity to earn important industry safety credentials. Grant staff reported that the NCCER Core training provided in Tech 101 and Core Plus was "important to employers" and that the training provided students with a good starting point, including safety components, as they moved into further training. Students in the PIC and Precision Maintenance programs did not have Tech 101 courses as a part of their programs. These students received the same student supports as all other SELA students and had curricula that was enhanced through grant efforts. A table of impacted programs is included in Appendix D.

Table 10. Scale-Up SELA Students Served, by Program[17]

Non-Credit Enrollment		Credit Enrollment	
Core Plus	222	Tech 101	50
Electrical	109	Electrical	117
Industrial Maintenance Mechanic	135	Industrial Maintenance	113
Pipefitting	74	Precision Machining	13
Welding	130	Process Instrumentation and Controls (PIC)	0
		Welding	111

Curriculum Development and Modifications

Existing courses were modified through the Scale-Up SELA grant, new programs were developed, and additional training components were developed by grant staff and instructors to meet the needs of employer partners.

Tech 101 and Core Plus were both enhanced through the grant. The existing Core class that was offered to Delgado's non-credit students was enhanced through the grant to incorporate OSHA training, team teaching, and student support services, including job placement. "From Core Plus, you can go to any of the other craft areas,' reported the Program Director. On the credit-side, the Tech 101 course serves as the sister-course to Core Plus and was modified in a similar manner through the grant. Tech 101 was designed as a co-requisite for the credit-bearing programs in Welding, Electrical and Industrial Maintenance. A grant instructor reported that Core Plus and Tech 101 are "a good introduction for students who have no technical experience," and that these courses position students well to continue into a specific training content area.

[17] Enrollment data as of August 17, 2018.

New programs were developed and offered through the grant. Grant staff worked with college leadership and instructors to develop and offer new courses, including a new Process Instrumentation and Controls (PIC), an accelerated electrical training curriculum, and an Electrical Journeyman Prep course:

- **Process Instrumentation and Controls Curriculum**– Grant staff worked to integrate industry-based credentials into previously-developed curriculum for a new credit program, Process Implementation and Controls, which earned SACS curriculum approval in the fall of 2015. Grant staff reported that the grant supported the OSHA 30 training and marketing efforts for the college's PIC program, and that once the program was SACS approved, grant staff actively recruited students for the new PIC program, and they "did our best to get to word out about this new program."
- **Accelerated Electrical Curriculum** – The Scale-Up SELA grant staff drafted and gained approval for an accelerated electrical curriculum that incorporated team teaching and allowed students to complete a Certificate of Technical Study (CTS) in one semester versus twelve months.
- **Non-credit Electrical Journeyman Prep Course** – Grant staff developed this course, with input from industry partners, to assist individuals with preparing for the ICC #703 exam that leads to the Electrical Journeyman License. The course ran for 7 consecutive Saturdays. Due to its popularity, grant staff worked with Delgado's Curriculum Committee to include this as an elective course for students enrolled in the for-credit Electrical program.

In collaboration with, and in response to, employer partners, customized trainings were developed throughout the grant period. Grant staff and instructors worked to develop new training programs that met the needs of employer partners including:

- **Hispanic Welding Course** - Grant staff worked with a partner to develop curriculum for a Hispanic welding course that incorporated team teaching and bilingual welding instruction. This course was offered at the college before the TAACCCT grant, and grant staff were able to continue to offer this course with the assistance of the TAACCCT funding.
- **The Aluminum Welding training curriculum developed for Textron -** Grant staff reported that working with a subject matter expert (SME) to develop the aluminum training curriculum was "the best thing we've ever done, because Textron wanted the training but could not share proprietary blueprints." Grant staff reported hiring a retired Textron employee to serve as an SME to provide input into the curriculum, including valuable insights into "the standards and way that Textron would want things to be, to ensure that we could meet their standards." The SME was reported to have already known the instructors, which allowed for an easier working relationship. After the curriculum was developed, the SME monitored the training cohorts to ensure that the trainings were conducted according to the designed model.
- **Accelerated training model for Pipefitting courses -** At the request of Turner Industries, grant staff developed NCCER Level 3 and Level 4 Pipefitting training. Since Levels 3 and 4 were offered for incumbent workers, grant staff developed an accelerated model of training that removed redundant components of the training program so that workers could progress through the program more quickly. "Turner had concerns about the length of time needed to complete the training program as it was originally designed," reported grant staff. "By accelerating the format to offer this new programming and these new credentials, we're able to meet employers' needs."

Delivery of Scale-Up SELA Curriculum

In both credit and non-credit classes, Scale-Up SELA instructors utilized team teaching, hands-on learning, enhanced technology and hybrid learning opportunities to deliver components of the Scale-Up SELA curriculum to students.

Each of Scale-Up SELA's Core Plus and Tech 101 courses incorporated a contextualized learning approach through a team teaching model (based on the I-BEST Model). The contextualized learning model utilizes a team teacher to provide supplemental instruction in foundational learning areas of reading, writing, and math. In the fall of 2015, a grant-funded lead team teacher was hired to support Scale-Up SELA courses. Scale-Up SELA staff also hosted two team teaching trainings to introduce instructors to the approach. In the 4th Quarter of PY 1, Scale-Up SELA also began incorporating team teaching in the classroom through Core Plus and Tech 101. In PY 2, grant staff introduced team teaching to two additional program areas – Electrical and Welding.

Both student and instructor interview participants reported that team teaching was a positive addition to the classroom. Each group described the team teaching model as "really helpful" and a tool that allowed instructors to meet each student where they were, tailoring learning goals and setting a personalized learning pace. One teacher described team teaching as giving him "extra hands" to reach students in need of extra assistance, particularly in the math components of the curriculum. "The math modules break them a little bit," explained one teacher, "Team teaching helps us to teach in smaller groups when they're struggling." Several students echoed this sentiment and reported, "it's helpful to have two teachers in the room to help get us up to speed." Team teachers reported that the contextualized approach also allowed them to "refer students to the Navigators in a timelier manner…We kept the Navigators up to date on how the students were doing," which ensured that students received the necessary supports.

Students reported that hands-on learning is their favorite part of the classes and prepared them well for employment. Students reported that they found the hands-on components of their programs "interesting," "something new," and "the best way to apply these skills." Students also reported that the hands-on learning prepared them well for employment, as most employers required students to test onsite to "prove your skills". These students reported that by practicing in class, they see their own skills improving every day, which increased their confidence in their ability to test for individual employers, "you can't cheat on the skills tests," they explained.

Grant staff and instructors developed a fully online version of Tech 101, which was offered as a pilot course. Staff reported that this course received "mixed reviews," and was not offered again after the pilot. The instructor from the pilot course reported that the computer skills of the students was a challenge with the online course, and that for a technical course to be successful in an online format, instructors also need to be adequality tech-savvy and committed to utilizing the format. College leadership at Delgado reported that the course was the first technical training course offered as an online format at the college. Leadership reported that the online Tech 101 course, while it was challenging for some of the students, was a success of the grant, as it allowed the college to explore ways to incorporate hybrid learning into technical training. After the pilot, grant staff reported offering a hybrid model, through which students received more reinforcement and support in-person, in addition to testing for performance.

New equipment was incorporated into several SELA programs. Grant staff and instructors reported that the new equipment increased capacity in the labs and have "made a huge difference" for the program. Staff reported that the new equipment has allowed the Scale-Up SELA program to meet the needs of employers and allowed for the program to customize training to meet specific employers' specifications. For example, Scale-Up SELA grant staff purchased guideWeld® virtual welding stations, and trained instructors to incorporate this technology into Welding 101. Staff also purchased PLA learning systems and a Pump Demonstration Training Model for the PIC program that allowed students to be trained on the workings of centrifugal pumps. Additionally, a new Iron Worker was purchased to increase capacity of the Precision Machining program. A list of all equipment purchased through the grant is in Appendix E.

Articulation of Credit

Grant staff developed articulation agreements with South Central Louisiana Technical College (SCTLC) and Nunez Community College. Grant staff reported that they were able to finalize an MOU with SCTLC for articulation of Core Plus into SCTLC's Industrial Maintenance program. Scale-Up SELA Core Plus and Industrial Maintenance Level 1 courses were offered at SCTLC, and grant staff reported that the MOU allowed students to continue seamlessly into the rest of the Industrial Maintenance program. Additionally, grant staff developed an MOU with Nunez Community College that outlined the credential articulation agreement between Core Plus and Nunez's Electrical One program. Through this agreement, Core Plus program completers could immediately transfer into Nunez's Electrical program upon completion.

Challenge exams were developed for awarding credit for prior learning. In April 2016, grant staff coordinated a Prior Learning Assessment training for instructors, which laid foundational work for the development of Challenge Exams. Prior to creating the Challenge Exams, each instructor independently revised and sharpened the learning outcomes for each program of study and, in the fall of 2016, developed corresponding Challenge Exams. The final Challenge Exams incorporated both written and experiential skills portions. Scale-Up SELA's Student Navigators worked with students in credit bearing programs to identify previous non-credential experiences that students may have brought with them that can count for credit in the Scale-Up SELA programs.

Student Support Services | Research Question 3

Throughout the Scale-Up SELA program, grant staff worked to recruit, retain, and provide job placement supports to students.

Recruitment of Scale-Up SELA Students

Staff partnered with five local opportunity centers to recruit additional students for Core Plus. These centers, part of the City's Network for Economic Opportunity Initiative, served disadvantaged jobseekers by providing training opportunities, case management, and other supportive services. These participants were first served at their local Opportunity Center, where they were assigned a case manager and participated in a readiness training program. Through this partnership, participants were referred to Delgado to earn industry- based credentials through Core Plus. While at Delgado, these students were enrolled in the Scale-up SELA program and received grant supports including academic and employment assistance. Upon completing Core Plus, participants returned to the Opportunity Center for employment assistance, and Core Plus completers were reported to have been "given first preference in hiring opportunities" connected to the city airport construction projects. Scale-up SELA Navigators continued to lend support to the students by conducting employment follow up.

Staff reported that the most successful recruitment approach were word of mouth from previous students and key partners, and community outreach efforts. The Program Director reported that the City of New Orleans and Job1 were particularly influential in spreading the word about the Scale-Up SELA program to their constituencies. Staff also reported that the distributed flyers at community events in the communities near campus, increased their presence on Facebook. When interviewed, students often reported "Job1" or "a friend already in the program" as the most frequent ways in which they heard about the program.

Grant staff worked throughout the grant with the college's Marketing Department to develop a marketing plan that focused on highlighting the programming available through the Scale-Up SELA program. The approved marketing plan was implemented during the summer of 2017. However, staff reported that when they ask students how they heard about the program, some reported "social media," but staff were unable to determine if they saw posts that were part of the marketing plan or through other avenues on social media platforms. The Program Director perceived that the marketing plan helped with recruitment, but she was unable to pinpoint the exact affect that it had on recruitment.

As the grant moved into PY 4, grant staff reported that their recruitment approach changed to accommodate the timeline for the end of the grant. The Program Director reported that as grant staff spoke to students enrolling in the program in PY 4, they shared with them that they would only have the Students Navigator and Career Developer supports through the spring of 2018. They reported that during this final year, the Career Developer engaged with students earlier than they had previously in the grant, in an effort to "provide students with as many supports, while we still can."

Retention of Scale-Up SELA Students

To support students in the Scale-Up SELA Program, grant staff and instructors provided a variety of retention related supports; the Student Navigators were the primary source of academic and non-academic support for Scale-Up SELA participants. The Student Navigators provided enrollment assistance, academic and career advising, and ongoing case management to address any barriers to student enrollment or program completion.

The use of Individual Service Strategy (ISS) allowed Student Navigators to engage with Scale-Up SELA students early after enrollment in the program. The ISS was designed to help students draft initial academic or career goals upon entering the Scale-Up SELA program. Approximately one month after completion of the ISS, the Student Navigators worked with students to develop an in-depth Individual Service Plan (ISP), with specific goals and detailed action items that outline a path to goal attainment. According to the Navigators, the forms allowed them to work with each student to "see what they want to do, both academically and career-wise." By understanding goals up front, Navigators reported that they could "treat students as individuals," and support each student's unique goals and needs.

Student Navigators provided intrusive advisement, a case management-style of support, to Scale-Up SELA students. "We help them with everything," explained on Student Navigator, "this support isn't something that you don't typically receive in school." The two Navigators reported that they were regularly in the classrooms, and that they made themselves visible and available to the students. Students echoed these sentiments about the Student Navigators, "they check all the time to see how we're doing. They'd do anything for us," explained one student. Another noted, "[their support] is really beneficial for a program like this, especially if you haven't been in school for a long time." Student Navigators reported that all primary interactions with students were case-noted.

Navigators reported that the supports offered that were the most utilized were resume review, job application assistance, and "just talking, and being there to listen to them." Navigators reported that for many of the non-traditional students in the programs faced barriers that made attending the program challenging. "You have to understand their struggles," explained the Navigators, "it's not as simple as they don't want to come to class." They reported, and instructors agreed, that common challenges that non-credit Scale-Up SELA students faced included family life issues (e.g., utilities being shut off, lack of basic needs being met), transportation issues (e.g., car trouble or unreliable public transportation), and incarceration (either became incarcerated or were still transitioning out of incarceration and adjusting to a new lifestyle). For students in the credit programs, Navigators reported that most of the challenges that students sought assistance with were related to scheduling classes around work hours, as more of the credit students were incumbent workers who were trying to skill up.

Placement of Scale-Up SELA Students

The Career Developer provided career support to Scale-Up SELA program participants in the form of in-class job readiness workshops, one-on-one resume and interview prep sessions, and formal opportunities to practice professional development skills, including job fairs and employer receptions.

The Career Developer devoted a significant amount of time to developing and maintaining relationships with employers to identify and secure job opportunities for Scale-Up SELA program completers. The work of the Career Developer and Scale-Up SELA grant staff to engage employers throughout the grant is addressed in the Partner Engagement section of this report. The Career Developer reported contacting companies when they posted relevant positions so that she could both introduce them to the Scale-Up SELA program and to build new relationships.

Job Readiness Workshops introduced students to important skills and knowledge areas needed to successfully secure and retain employment. The workshop was hosted by the Career Developer during class, two weeks before the end of each Scale-Up SELA program, and addresses the following topics:

- Completing applications properly;
- How to identify skills and abilities;
- Resume development;
- Interview skills and technique;
- Professional behavior and body language;
- Job search strategies;
- How to address a criminal record;
- Conflict resolution and being a team player;
- Workplace diversity; and
- How to retain employment.

Job Readiness Workshops were automatically included in Core Plus classes (non-credit side), and Tech 101 instructors had the opportunity to request these services to be included in their courses, in addition, standalone workshops were offered for credit students outside of class time. For credit students who did not have Job Readiness Workshops, the Career Developer worked with students outside of class time. Students reported that the Career Developer "helped me with my resume" and "always lets us know what she's working on for us."

Staff and students both reported that job readiness services were a key factor in student placement. Grant staff acknowledged that without the Scale-Up SELA grant, job readiness services would not have existed for non-credit students. The Program Director attributed success in student retention and placement to these supports. Students echoed these sentiments and noted that the Career Developer "helped us with anything, at any time" and that the supports provided included "job searching, creating a resume, and preparing for interviews." "We wouldn't have been ready to apply for jobs [without her support]," explained one student. One employer reported that Delgado students "are prepared and ready to hit the ground running…Delgado students stand out."

Scale-Up SELA job fairs were well received by both employers and students. Throughout the grant, grant staff hosted job fairs for Scale-Up SELA students. One employer described the job fairs as "phenomenal" and reported being pleased at the amount of exposure to employers that students were able to have through the job fairs. "The students were well prepared, they understood how they were supposed to behave at a job fair…they knew what they were doing," explained another employer. Students reported that the job fairs "gave us a chance to meet with the employers face-to-face" and grant staff reported that the job fairs were an opportunity for students to gain exposure to the industry as they began their job search.

Partner Engagement | Research Questions 4, 6

One of the strengths of the Scale-Up SELA program was the engagement of, and contributions from, industry and community partners. Throughout the grant period, grant staff worked to leverage existing relationships and forge new partnerships. Feedback from employer partners was incorporated into programmatic changes, new programs were developed for employers,

Table 11. Partner Contributions

Partners	Program Design, Program Management, and Curriculum Development	Recruitment. Training, and Placement	Leveraging of Resources and Sustainability
Advisory Board	Reviewed curriculum and provided meaningful recommendations for modification	Attended job fairs, mock interviews, reviewed resumes and hired participants	
Workforce System		Recruited students into the Scale-Up SELA program, and provided services for WIOA eligible participants	Leveraged Workforce Board's WIF grant to mutually support both programs
Employers	Provided feedback on curriculum, assisted in the development of curriculum and training programs for incumbent workers	Attended job fairs, mock interviews, reviewed resumes, and hired participants	Employer-focused trainings will continue on an as-requested basis
Education and Training Providers		Offered Scale-Up SELA courses and developed articulation agreements and MOUs	

Grant staff used the Advisory Board's feedback to make various curriculum revisions, including incorporating OSHA 30 in the electrical program. Additionally, the Advisory Board suggested refining the welding program to include welding in confined spaces or while wearing additional safety gear, so that the hands-on experience students have in the lab more closely resembled workplace environments. Additional changes were incorporated in the welding program through developing additional curriculum around stick welding, which was identified by employer partners as a high-demand competency.

Through partnerships with the local Workforce Development Board and Job1, grant staff reported that were able to provide Scale-Up SELA training to more students than they would have without the partnerships. The WDB and Job1 provided additional supports and services to participants who enrolled in Scale-Up SELA through their programming. Representatives from the WDB reported that "we have a natural relationship, since working towards the same goals." Leveraging

opportunities with the workforce system increased the reach of the Scale-Up SELA grant in the community.

Employers were a vital partner for the success of the Scale-Up SELA program, as they participated in the Advisory Board, attended job fairs and mock interview events that prepared students for job placement, they hired Scale-Up SELA participants. Grant staff were able to develop customized training programs for some employers, including an aluminum welding, accelerated pipefitting, and Hispanic welding courses to meet employer needs. Further information regarding these new programs is discussed in the Curriculum Development and Modifications section of this report.

Education and training partners, including Tulane University's Earn and Learn program, South Central Louisiana Technical College, Nunez Community College, all collaborated with Scale-Up SELA grant staff to either offer Core training or provide opportunities for the articulation of Core Plus for the training programs offered at these institutions. Partnering with local educational institutions to provide Core in other locations and through other programs allowed Scale-Up SELA programming to meet students where they were, rather than requiring all students to come to Delgado's campuses to receive their training. Grant staff were able to identify educational and training programs that were aligned with the training provided through Scale-Up SELA to expand partnerships at these institutions.

Factors Contributing to Partner Involvement

Since most of the programming under Scale-Up SELA existed before the grant, many partnerships were established before the grant. Grant staff were able to leverage and expand existing relationships with local industry partners. Partners reported that they already knew of Delgado, and the high-quality students who come out of training programs. "There's definitely a high demand for Delgado students," explained one employer. "We've had a great partnership with Delgado," reported another employer, "We've been working with them for a while. We're happy to help, they're very responsive to our feedback and they use our time well."

Grant staff worked strategically with their local Workforce Development Board through Job1 to recruit program participants for each of their grant funded programs. By working together and leveraging grant funding collectively, each organization maximized the impact of their respective grant. The partnership with the Job1 – American Job Center has complimented grant staff efforts by preparing Core Plus participants with job readiness training. Additionally, Scale-Up SELA has supported the Workforce Development Board's efforts by extending employment assistance to program participants who arrived at Delgado through the Workforce Development Board. Furthermore, grant staff collaborated with Job1 to serve jobseekers through Core Plus before they returned to Job1 for placement within the City's airport construction project.

Scale-Up SELA grant staff made a concentrated effort to ensure that they had a clear understanding of employer partners' needs and were respectful of their time and services. Grant staff demonstrated this commitment by consistently aligning their schedule to best meet employers' needs (i.e. aligning the Employer Advisory Board meeting time to compliment another meeting that many of the Board members attend on the same morning) and translating employer feedback into meaningful curriculum revisions. Grant staff built in opportunities for employers to articulate what they were looking for in their relationship with Delgado. For example, after inviting

employer partners to participate in their Scale-Up SELA job fair, the Career Developer distributed an Employer Registration Form outlining the types of jobs they were trying to fill, so that she was able to prepare and direct students appropriately. Additionally, grant staff created an Employer Engagement Checklist, which allowed employers to identify their specific needs and goals, and the ways in which they wanted to engage with the grant. The grant staff's employer-oriented approach resulted in employer partners feeling valued and being willing to make investments in the Scale-Up SELA program. "We've never partnered like this before," explained one employer, "it's been a really good experience."

Grant staff worked with employer partners to offer specific training courses to meet employer needs. Grant staff and instructors developed an aluminum welding training program for Textron, a millwright training program for St. Charles Parish Waterworks, and Pipefitting Levels 3 and 4 for Turner Industries, among other training programs for partners. Working with employer partners to offer specific trainings that met the needs of employers allowed grant staff to continue to build and foster relationships with partners.

Most Impactful Partner Contributions

City Airport/Core Plus partnership yielded more participants than anticipated. Grant staff reported that the partnership with the City resulted in more participants than they had originally anticipated, which allowed the grant to be "more successful and have a bigger reach than we thought it could." The influx of Scale-Up SELA students from the City allowed grant staff to "focus on serving and supporting students, rather than solely focusing on recruitment." While grant staff reported that they still recruited students into the program, the pipeline established with the City allowed for more time to be spent on student services and job placement.

Advisory Board participation and feedback was reported as crucial to program success. The Employer Advisory Board was notably invested in the success of Scale-Up SELA, as demonstrated by their continued attendance of Advisory Board meetings, their participation in career development opportunities for students, their meaningful feedback on curriculum, and ultimately, by hiring Scale-Up SELA program completers. Employer Advisory Board members participated in job fairs, employer receptions, and mock interviews, and offered specific and thoughtful curriculum revisions that grant staff readily adopted. Members of the Employer Advisory Board reported that they feel their "input is valued and used meaningfully", that their time is respected and "well used", and that "the partnership is a natural fit." The grant staff were proactive in catering to the needs of their employer partners and maintained positive and beneficial relationships to ensure continued engagement with their partners.

Least Impactful Partner Contribution

While grant staff reported that some employers did not contribute as much as they had originally anticipated, all partners contributed something to the success of the Scale-Up SELA program. Grant staff acknowledged that some partners' level of engagement ebbed and flowed throughout the grant period, but none of the partners disengaged entirely.

However, the partnership that was pursued to offer Green Infrastructure certifications did not fully develop in the way that grant staff had hoped. Grant staff reported that a partnership was forged through a consortium that included the City of New Orleans, the Sewage and Water Board, Delgado, and GNO Inc. that was designed to provide certifications to employees in the

water industry. The training curriculum cross-walked with the Advanced Manufacturing training provided by Scale-Up SELA, specifically with Core Plus and OSHA. A pilot of the new green infrastructure course was offered in the spring of 2017. However, challenges arose related to eligibility of the participants to take the certification exam. A high school diploma was set as the minimum educational experience required to take the National Green Infrastructure Certification Exam. This proved to be a challenge for Delgado, as grant staff reported that the college does not require a high school diploma for training programs. This incongruency resulted in students being unable to test for the credentials as part of Delgado's programs. As such, future cohorts of Green Infrastructure students had to meet eligibility requirements to participate in the program, so that they could test for the credential.

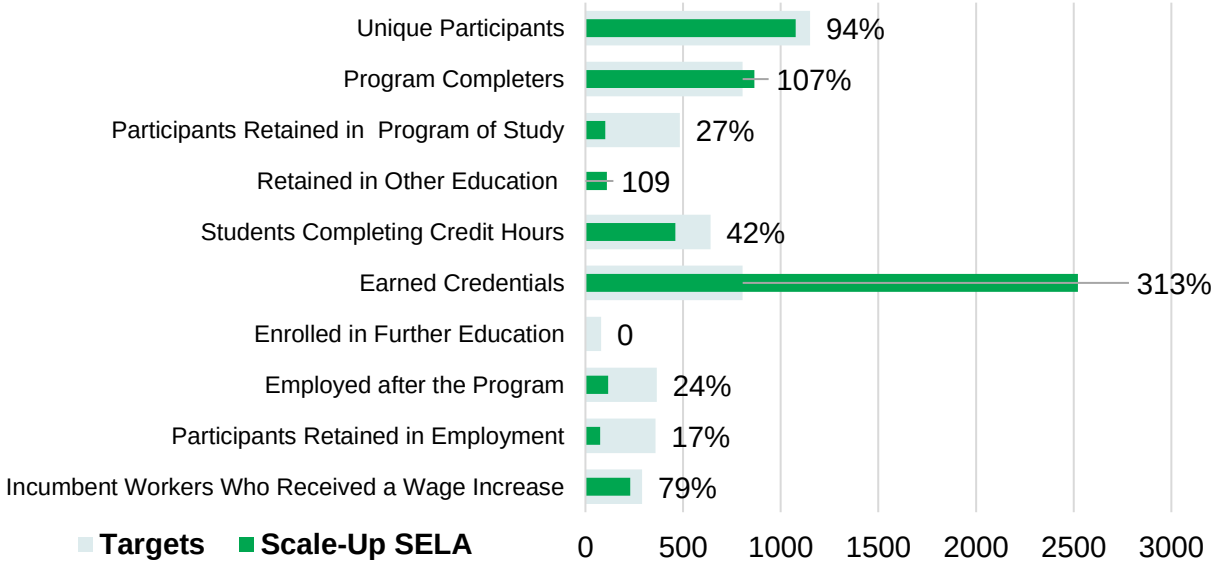
Program Output Achievement | Research Questions 5, 7

During the grant period, grant staff successfully accomplished the articulated goals for their TAACCCT grant. Grant staff, instructors, institutional leaders, and partners all worked to achieve the goals of the Scale-Up SELA program.

Program Outputs[18]

The Scale-Up SELA program had a goal of serving 1,150 unique participants and 805 program completers throughout the grant period. The Scale-Up SELA grant team nearly met the number of participants served and exceeded the number of program completers. Additionally, 2,521 credentials, certificates, and degrees were awarded to program completers, significantly exceeding the goal of 805. The Scale-Up SELA program did not meet outcomes related to employment; however, grant staff reported that employment was often verified by students through follow up calls, and students were not easy to connect with after the left the program. Additionally, wage data was not available to verify employment or wage data.

Figure 5. TAACCCT Output Achievement



[18] This data was provided to the Evaluation Team on September 20, 2018. However, grant staff continued follow up efforts with students and may report different final outcomes in their last APR, as they were able to update their data until September 30, 2018.

Accelerators of Output Achievement

The following accelerators facilitated output achievement, as these accelerators expedited the efforts of grant staff as they implemented the Scale-Up SELA program. Accelerators related to student satisfaction, the strategic and intentional engagement of partners, job readiness supports for students, and the team teaching model all supported successful implementation of the Scale-Up SELA program.

Grant staff strategically and intentionally engaged employers and workforce partners to fully leverage the Scale-Up SELA grant. Through the intentional leveraging of other training programs, grants, and opportunities to create training programs for employer partners, grant staff were able to build a pipeline of students for the Scale-Up SELA program who might not have found the program otherwise. “By working with partners to find new ways to include people from different programs, we’re broadening the reach of the grant,” explained the Program Director.

Students’ satisfaction with the Scale-Up SELA program resulted in students spreading the word about the program to their peers, which increased recruitment for the program. Scale-Up SELA participants reported that they were generally pleased with their experiences in the program and appreciative of the hands-on support that instructors and staff provided. Students noted that they believed the classes they participated in were teaching them the skills they need to be successful in their industry, and that they knew where to go for additional supportive services. Students reported that they “told everyone I know to join this program,” and when interviewed, several students reported that they first heard about this program from a friend who had previously enrolled.

Grant staff, instructors, students, and college leadership all reported that the team teaching approach allowed students to persist in the program. College leadership reported that the team teaching approach appealed to students because “it made going back to school seem more realistic.” Students in the program agreed and one reported, “I hadn’t been in classes for a long time, so it was intimidating. But the team teacher was able to help me a lot.” The team teaching model helped to support non-traditional students in the classrooms, which students reported allowed them to feel more confident about their ability to continue into the next levels of their programs.

Job readiness supports provided to students positioned students well to begin their job searches. Employers noted that students were well-prepared for job fairs, had updated resumes, and were prepared to meet with employers. One employer reported “She [Career Developer] always sends me the best candidates. I feel like I struck gold with Delgado, because I don’t have to go through a thousand people to get it right.” Students reported that the supports provided helped them to be “ready to go into an interview.”

Barriers that Hindered Output Achievement

The following barriers hindered output achievement, as these challenges affected the efforts of grant staff as they implemented the Scale-Up SELA program. Barriers related to the development of articulation agreements, transportation for students, and the time-consuming nature of case management and student follow up all hindered further progress of the grant.

The grant definitions of a completer for the TAACCCT grant limited grant outcomes related to employment. Throughout the grant, staff intentionally leveraged partnerships with the City to train candidates in Core Plus who would ultimately be placed in employment with the City for jobs at the airport. However, some of these completers were often placed in subsidized employment through the American Job Center (Job1) and maintained the status of subsidized employment into the quarter after exit. Because of this, grant staff were unable to report these completers as "employed after program of study completion," which negatively impacted the outcomes reported by grant staff.

Grant staff reported that external articulation agreements did not progress in the ways that they had hoped. Originally, grant staff reported that they had anticipated developing articulation agreements for entire programs of study. Grant staff learned that this was difficult to complete because "the technical training at Delgado is very customized, and the courses are customized to meet employer needs." The Program Director reported that due to the customized programs, the four-year colleges were not able to easily articulate a complete Scale-Up SELA program. Grant staff reported that they then began pursuing course equivalency, which articulated credits on a course-by-course basis. Grant staff noted that Core Plus articulated into the credit-side of the college through course equivalent articulation.

Students' transportation barriers generally limited the participants of the program to students who either had reliable transportation or who lived in close proximity to the campus. Grant staff perceived that potential students who lived further away from campus were not joining the program due to their inability to have reliable transportation to classes. Students reported that their transportation issues included lacking a vehicle, the indirect public transportation near campus, the cost of gas, and relying on friends for a ride, all of which made it more difficult for them to attend classes. The Career Developer reported that students' transportation challenges also affect their job searches, as "students were not always able to drive to job interviews."

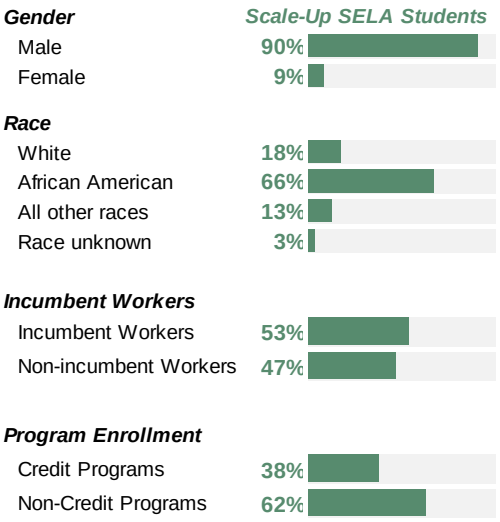
Student follow-up and intrusive advisement were challenging tasks for grant staff due to the size of the caseload. Grant staff collectively reported that the time-consuming nature of the intrusive advisement and case noting of the services provided to students, while a hallmark of the Scale-Up SELA program, made it challenging for grant staff to keep up with the administrative components of supporting students. "We may not have had the right tools to be efficient," explained the Program Director, "we did not have sophisticated tools for case noting and tracking." With the number of students that grant staff served during the grant period, staff reported that following-up with students who had exited the program was often challenging, as students did not always call them back, so they were unable to confirm employment for all SELA students.

KEY OUTCOMES FINDINGS[19]

Scale-Up SELA Student Demographic Data

In total, the Scale-Up SELA program served 1,074 students, of those 404 students were in the credit programs and 670 in the non-credit programs. The average age of a program enrollee was 32.5 years. Individuals enrolled in courses for credit (average age of 30) tended to be younger than those enrolled in non-credit courses (average age of 34). Participants were mostly male (89.9%), while 8.8% were female; this breakdown was similar across both credit and (90.6% and 6.2%, respectively) and non-credit (89.6% and 10.4%) students. Additionally, 53.4% of Scale up SELA students were incumbent workers.

Figure 6. SELA Student Demographics



Most Scale-Up SELA students were Black (66.3% overall). However, there was a larger percentage of White students in credit programs (28.5%) than in non-credit programs (11.3%).

Program Enrollment

Table 12. Program Enrollment

Program	Credit	Non-Credit
Tech 101 Only / Core Plus Only	50	222
Electrical	117	109
Industrial Maintenance	113	135
Pipefitting	-	74
Precision Machining	13	-
Welding	111	130
Total	**404**	**670**

Tech 101 is offered as a co-requisite course for all the Scale-Up SELA credit-bearing programs. However, the individuals listed in Tech 101 in the table may have been enrolled in a course of study that was outside of the purview of this grant, though their enrollment in Tech 101 included them within the Scale-Up SELA program. Similarly, individuals in non-credit programs may have completed the Core Plus course as part of their programs of study, but those listed in the Core Plus row below are those that did not enroll in an additional Scale-Up SELA grant-funded program. This analysis does not include students enrolled in the Process Instrumentation and Control program that was implemented towards the end of the grant, as no data was available.

Table 13. Percentage of Incumbent Workers in Each Program of Study

	Credit	Non-Credit
Core Plus Only	n/a	45.0%
Tech 101 Only	58.0%	n/a
Electrical	49.6%	53.2%
Industrial Maintenance	57.1%	69.6%
Pipefitting	66.0%	51.4%
Precision Machining	38.5%	n/a
Welding	48.6%	52.3%

[19] Data for the Outcomes Evaluation was provided to the Evaluation Team on August 17, 2018. While grant staff continued to update their data files until September 30, 2018, all data used in the Outcomes Evaluation is the subset of data that was finalized as of August 17.

Credential Attainment | Research Question 1

Scale-Up SELA students had the opportunity to earn a variety of industry recognized credentials, and the specific credentials varied based on the individual programs of study.

Table 14. Credentials Available by Program

Non-Credit Programs		Credit Programs	
Program Area	**Industry Based Credential**	**Program Area**	**Industry Based Credential**
Core Plus	NCCER Core OSHA 10[20]	Tech 101	NCCER Core
Electrical	NCCER Core NCCER Level 1 NCCER Level 2	Electrical	NCCER Level 1 NCCER Level 2 NCCER Level 3 NCCER Level 4
Industrial Maintenance Mechanic	NCCER Core NCCER Level 1 NCCER Level 2	Industrial Maintenance	NCCER Level 1 NCCER Level 2
Pipefitting	NCCER Core NCCER Level 1 NCCER Level 2	Precision Machining	NCCER Level 1 NCCER Level 2
Welding	NCCER Core NCCER Level 1 NCCER Level 2	Process Controls and Instrumentation	NCCER IBC
		Welding	NCCER Level 1 NCCER Level 2

Overall, 83.8% of Scale-Up SELA students earned a credential and students earned an average of 2.5 credentials. Students in non-credit courses were slightly more likely to earn a credential (85.4% earned at least one credential) than those in for-credit programs (81.2% earned at least one credential). However, participants in for-credit programs earned more credentials on average (2.6) than those in non-credit programs (2.4).[21] This could be due in part to the length of for-credit programs providing an opportunity for the student to earn more credentials. Additionally, students on the non-credit side in programs with partners, such as Job1, only received Core Plus training through their programs. There was no difference in average number of credentials earned between students who were incumbent workers (2.5) and those who were not incumbents (2.5).

Table 15. Credential Earning Amongst Scale-Up SELA Students

	Credit		Non-Credit	
	% Earned at least one	**Average # Earned**	**% Earned at least one**	**Average # Earned**
Tech 101 Only/Core Plus Only	76.0%	1.9	81.1%	1.6
Electrical	87.2%	3.4	95.4%	2.9
Industrial Maintenance	85.0%	2.3	76.3%	2.2
Precision Machining	53.8%	0.9	N/A	N/A
Pipefitting	N/A	N/A	98.6%	3.2
Welding	76.6%	2.7	86.2%	3.0
Total	**81.2%**	**2.6**	**85.4%**	**2.4**

[20] OSHA 10 is not counted as an industry recognized credential for TAACCCT outcome reporting purposes..
[21] t= 2.20, df= 1072, p< .05

Students in the Scale-Up SELA program were significantly more likely to earn a credential (83.8%) than students in similar programs that were not part of the grant-funded program (57.1%).[22] Many Scale-Up SELA students earned program earned more than one credential, as 2,672 credentials were earned among the 1,074 students in the Scale-Up SELA program. In fact, Scale-Up SELA students earned significantly more credentials (an average of 2.5 per student) than non-program participants in the comparison group (an average of 0.7 per student).[23] The difference between these two groups was statistically significant. To better understand the size of the difference, the effect size was computed. Effect sizes are useful for knowing if a statistically result is practically relevant. In education research, effect sizes of 0.30 are considered small, 0.50 are considered medium and 0.80 are considered large.[24] In this case, the effect side was 1.75 for credit students, and 0.88 for non-credit students. This means that there was a large different between the Scale-Up SELA students and those in the control group. Furthermore, this significant difference held true for both students in credit courses and those in non-credit courses, and the effect sizes for both groups were large.

Table 16. Average Number of Credentials Earned and Standard Deviation for Treatment and Comparison Group Members

	Scale-Up SELA student Average (SD)	Comparison Group Average (SD)	Effect Size (*d*)
Credit[25]***	2.64 (1.71)	0.63 (0.59)	1.75
Non-Credit[26]***	2.40 (1.73)	1.07 (1.28)	0.88

p<.001***

[22] X^2= 175.1, df= 1, *p*< .001
[23] Treatment (M= 2.49, SD= 1.72), Comparison (M= 0.67, SD= 0.70), *t*= -31.80, df=1454, *p*< 0.001, *d*= 1.50
[24] Cohen's *d* (the effect size) is calculated by the change in the Scale-Up SELA students credentials earned and those of the treatment group, divided by the pooled standard deviation for both pre-and post-program wages and can be thought of as a standardized difference. Effect sizes range from small (0.20), to medium (0.50) and large (0.80), see Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed). Hillsdale. NJ: Lawrence Earlbaum Associates, 2.
[25] *t*= -23.02, df= 449.56, *p*< .001
[26] *t*= -8.82, df= 134.75, *p*< .001

Program Completion | Research Question 2

For the purposes of USDOL reporting and this analysis, program completion was defined as students who had earned an industry recognized credential.

Overall, 850 students (79.1%) completed a grant-funded Scale-Up SELA program. The percentage of students considered program completers from credit programs (80.9%) was similar to the percentage completing non-credit courses (78.1%). Similarly, the percentages of students leaving the program before completion were roughly equal for both credit and non-credit courses.[27] Anecdotally, grant staff reported that students often left the program due to an employment opportunity, or because personal barriers (e.g., transportation, child care) proved too great for students to overcome. However, no data was collected from students who left the program early to ascertain the reason for the early departure from the program.

Table 17. Percentage of Scale-Up SELA Students Completing a Grant-funded Program

	Credit	Non-Credit
Tech 101 Only/Core Plus Only	74.8%	76.0%
Electrical	86.3%	90.8%
Industrial Maintenance	85.0%	54.8%
Pipefitting	n/a	98.6%
Precision Machining	53.8%	n/a
Welding	76.6%	85.4%
Total	**80.9%**	**78.1%**

Incumbent workers and non-incumbent workers completed Scale-Up SELA programs at similar rates.[28] However, incumbent workers in credit courses were significantly more likely to earn a credential to be considered a program completer (86.5%) than incumbent workers in non-credit courses (75.4%). This is noteworthy, as many of the employer-driving training courses that were developed were offered as non-credit programming. Throughout the program, grant staff reported that students on the credit-side tended to be perceived as more likely to complete their programs since they were working towards college certificates and degrees, in addition to industry recognized credentials.

Table 18. Scale-Up SELA Students Completing a Grant-funded Program by Incumbent Worker Status

	Credit Courses	Non-Credit Courses	Total
Incumbent Workers	86.5%[15]	75.4%[29]	79.6%
Non-incumbent Workers	77.8%	81.1%	79.9%[30]

[27] Credit (M=0.47, SD=0.94), Non-credit (M=0.41, SD=0.84), t= 1.12, df= 775.11, p= 0.26,
[28] Incumbent workers 79.6% completed, Non-incumbent workers 79.9% completed
[29] Incumbent workers in credit courses (86.5%), in non-credit courses (75.4%), X^2= 38.6, df= 2, p< .001
[30] There is not a statistically significant difference in program completion between non-incumbent workers in credit courses vs non-credit courses.

College Credits Earned Through Scale-Up SELA

For students in for-credit courses, program outcomes were further analyzed by the participant's likelihood of earning credits while enrolled and number of credits earned.

Table 19. Percentage of Students in Credit Bearing Courses Earning at Least One Credit and Average Number of Credits Earned, by Program of Study

	Percentage Earning Credit(s)	Average Credits Earned
Electrical	94.0%	19
Industrial Maintenance	82.5%	3
Precision Machining	84.1%	15
Tech 101 Only	76.7%	3
Welding	80.2%	15
Total	**84.7%**	**11**

In total, 84.7% of Scale-Up SELA students in credit bearing courses earned at least one credit while participating in the program. In fact, students who participated in a Scale-Up SELA program (84.7%) were significantly more likely than the comparison group to earn at least one credit (77.7%).[31] Therefore, participation in the Scale-Up SELA program increased the likelihood of successfully completing at least one class. Furthermore, Scale-Up SELA students earned a significantly greater number of credits while enrolled (average of 11.4) than comparison group members (average of 9.8). The effect size between the number of credentials earned between the Scale-Up SELA students and those in the comparison group was small (.15). Though this is a relatively small effect size, these results show that there are notable changes in the average number of credits earned by Scale-Up SELA students.[32]

The average number of credits earned per student varied by program type and whether a student was an incumbent worker. On average, incumbent workers in credit programs earned slightly fewer credits (11) than non-incumbent workers (12). This may be due in part to the types of programs that incumbent workers were enrolled in. Incumbent workers comprise more than half of all participants in credit programs overall (53.2%), and 60.4% of incumbent workers were enrolled in low-credit-earning programs (Industrial Maintenance or Tech 101).

[31] X^2= 8.36, *df*= 1, *p*< .01
[32] Treatment (M=11.36, SD=11.83), Comparison (M=9.75, SD=9.92), *t*= -2.37, df= 679.78, *p*< 0.05, *d*= 0.15

Employment and Wages | Research Question 3

Post-program employment data was not available for individuals in credit programs who were not incumbents, therefore this analysis includes employment information for non-credit students and incumbent workers only. Employment and wage data included in this analysis was provided to the Evaluation Team in mid-August 2018. Additional employment and wage data was collected by grant staff after this period, and is reflected in the TAACCCT outcomes, but is not included in this analysis.

A fifth of non-credit students who did not have jobs when they enrolled in Scale-Up SELA entered the workforce after completing the program (20.6%). An additional 53.4% were incumbent workers who remained employed throughout the program. In total, 74.0% of non-credit students were employed after the exiting the Scale-Up SELA program. Students reported that the job readiness and job placement services provided by grant staff were key factors in their ability to pursue employment after their training programs were completed. Grant staff reported that in addition to this data, they expected that there were other students who have gain employment, but whose employment grant staff could not verify without the wage data that was not made available during this analysis period.

Table 20. Number and Percentage of Scale-Up SELA Students Employed After Exit.

	Credit		Non-Credit	
	Number	Percentage	Number	Percentage
Employed Incumbent Workers	215	53.2%	358	53.4%
Entered the Workforce After Program	n/a	n/a	138	20.6%
Not in Labor Force or Unemployed	175	43.3%	174	26.0%
Unknown	14	3.5%	n/a	n/a

The average wage increases for incumbent workers who completed a Scale-Up SELA was $2.90 per hour. Of the 573 participants who were incumbent workers, only 161 reported a wage increase (28.2%). The chart below shows average hourly wage increases by employment status and program type for the 161 incumbent workers who reported increases. Incumbent workers who were employed part-time saw a larger hourly wage increase of $3.30/hr. than those who were employed full-time at $2.86/hr. Additionally, incumbent workers who participated in credit programs saw larger hourly wage increases at an average of $2.99/hr. compared to those in non-credit programs at $2.81/hr.

Table 21. Average Hourly Wage Increase Reported by Incumbent Workers in Scale-Up SELA Programs

	Average Hourly Wage Increase		
	Credit (N=82)	Non-Credit (N= 79)	Total
Full-time employed (N=119)	$2.99	$2.72	**$2.86**
Part-time employed (N=33)	$2.97	$3.74	**$3.30**
Total (N=161)	**$2.99**	**$2.81**	**$2.90**

LOOKING FORWARD | Research Questions 8,9

Sustainability

Program Sustainability

Grant staff reported that discussions on how to best sustain the momentum from the Scale-Up SELA program were still underway as the grant began to close. Staff reported that the academic programs on the credit side will continue to be offered, but without the intrusive advising, academic and employment assistance or job readiness supports. Staff reported that the equipment that was purchased through the grant will continue to be utilized in labs.

Grant staff reported that new programs on the non-credit side, including the aluminum welding program that was developed for Textron will continue to be offered, even outside of the Textron partnership. “Since we have the curriculum now, we can keep offering this,” explained grant staff. Additionally, the training for the Green Infrastructure certification that occurred in partnership with the City of New Orleans and the Sewage and Water Board continue to be offered through the partnership with Job1. However, the majority of the non-credit training will be provided through employer partnerships moving forward.

Grant staff reported that there was interest in exploring ways to retain the team-teaching approach for non-credit programs. in particular. Staff reported that college leadership are exploring future grant funding opportunities to offer team teaching, as this was reported by all stakeholders to be a highly successful component of the grant.

Increased Institutional Capacity

College leadership indicated that the Scale-Up SELA program affected both the way that instructors and leadership at Delgado think through curriculum development, and the types of learning opportunities that can be incorporated into the classroom. Leadership reported that the Scale-Up SELA program changed the way that Delgado leadership and faculty think about curriculum through their example of bringing multiple stakeholders to the table to share their unique perspectives and expertise. Since Scale-Up SELA, the college had made a strategic effort to include industry and employer partners in the curriculum development process on a more intentional basis with employer partners meeting monthly, initially, and now quarterly to provide feedback and inform decisions around curriculum. Their positive influence in the development of Scale-Up SELA curriculum has set the tone for future industry inclusion at the college. Scale-Up SELA also introduced the first hybrid training to be offered in a technical program at the college, opening new doors for non-traditional students. Grant staff reported that the Scale-Up SELA program “brought us into a new age,” through the focus on student supports, job readiness, and the new equipment that was leveraged through the grant.

Stakeholder Recommendations for Replication

Grant staff and college leadership encouraged future institutions to evaluate their internal capacity to support a prospective grant before submitting a proposal for funding. Internal checks could involve assessing businesses and open positions in their region to support the completers that would come out of a program and using an internal grant readiness checklist in conjunction with any grant proposals they consider submitting. Preparing in advance to navigate internal policies and procedures should simultaneously involve generating strong internal buy-in from other leadership and staff throughout the institution. Internal stakeholders are required to help secure classroom and office space, move internal processes along more quickly, and assist the grant team in promoting grant-funded programming.

Additionally, grant staff encouraged those considering replicating the Scale-Up SELA program to clearly understand the expectations of funders, and definitions of program outcomes, to mitigate the need to change midcourse. Another piece of advice for future institutions is to maintain strong data-tracking procedures to accurately reflect grant activities and progress, and to ensure continuity and precision over data tracking in the event of staff turnover. Staff also recommended cross-training to soften the effect of staff turnover and ensure resiliency to the grant team and program during periods of transition.

Staff also recommended that additional time for implementing such a program, including both a planning year, and more time at the end of the program to complete additional follow-up with students could yield a smoother process for future implementers. Staff reported that student follow-up is a time consuming process, and that, when available, wage data is often several quarters in arrears, so more time for follow-up could result in a more robust data set.

CONCLUSION

The Scale-Up SELA program was first and foremost a regional workforce development program. The goal of implementing the program, was to train TAA-eligible workers, veterans, and adults and to upskill those who were already engaged in the labor market and connect them to better paying jobs. Scale-Up SELA grant staff were successful in enrolling students into training programs and supporting them towards credential attainment. The results show that Scale-Up SELA completers earned, on average more than one industry recognized credential. Qualitatively, students reported that the supports that they received in the Scale-Up SELA program, including team teaching, advising supports, and job readiness workshops all positioned them for success both during their time in their programs of study and as they prepared to seek employment.

Incumbent workers received increases in their hourly wages after completing their training with Scale-Up SELA. This suggests that Scale-Up SELA completers had marketable skills that were in demand in the labor market. The Scale-Up SELA grant staff employed a variety of approaches to implement successful programs that achieved these outcomes including garnering support from college leadership, aligning their curricula to industry standards, purchasing equipment, and providing students with intentional supports and job readiness training. Future community college-based workforce development programs can draw from the Scale-Up SELA program experience in the areas of program modifications, student supports, and employer engagement.

Recommendations for Future Research

A review of evaluation findings and limitations suggests several avenues for future research. The Evaluation Team has identified three areas where further research may yield grater insight into the effects of the Scale-Up SELA:

- The extent to which wage increases were seen across all participants;
- The extent to which a longer post-program observational window would reveal impacts of greater magnitude;
- Exploring the types of employment earned by students and the extent to which wages vary by industry.

Since wage data was not made available for Scale-Up SELA students (outside of incumbent workers), the opportunity to study the extent to which wages increased as a result of the Scale-Up SELA program still exists. While incumbent workers' wages increased after their training programs, the effect on wages remains to be seen for participants, at large. Measuring an increase in wages for this program would provide an additional indicator of program success that was not available during the grant period.

Extending the post-program observational period to examine outcomes beyond the first quarter following program completion would allow for a more complete data analysis. The extended post-program period would result in multiple benefits to the body of research, including an opportunity to explore the extent to which the effects of the Scale-Up SELA program extended over a longer period of time. Additionally, as UI wage data is often in arrears, the extended period of post-program observation would allow researchers to examine the effects of the program on additional students, specifically those completing the program in the last six months of implementation.

Grant staff reported that students were able to secure employment in a variety of industries, including welding, electrical, pipefitting, and many other fields. Future research on the industries in which students obtain employment would allow for additional analysis on the effectiveness of preparing students for the targeted industries and differences in wage outcomes. This would allow institutions to identify opportunities for additional employer partnerships and needs for focused career coaching and job development services. The results of the research could allow Scale-Up SELA implementers to further develop career pathways for students into the target industries.

APPENDICES

Appendix A – Site Visit Protocols

Program Director & Program Coordinator Interview Facilitation Guide - 120 minutes

Changes to the Plan Discussion

1. Tell me about the staffing structure for the SCALE-UP SELA grant at (college).
    - # of staff, roles, FTEs
    - Tell me about any changes that have occurred to your staffing structure over time.
2. Tell me about the extent to which program delivery matches the original plan.
    - What changed, and when?
    - Why did these changes need to occur?
3. What articulates from the SCALE-UP SELA programs into credit programs?
4. What hybrid courses are you offering? Are there any additional courses that you plan to offer?
5. How are you integrating I-BEST team teaching into the program?

Looking Back Discussion

1. Looking back on the grant as a whole, what were the most notable successes? Why?
2. What would you say were the most notable challenges? (i.e., what do you wish would have gone better?)
    - How were these challenges addressed?
3. What do you wish you would have known from the beginning of the grant? (I.e., what are some lessons that you learned from this grant process?)
    - What resources were you lacking that would have helped improve the SCALE-UP SELA program?
4. How to you think SCALE-UP SELA grant has affected Delgado?
    - How do you think that the grant has affected institution capacity building?
5. How would you rate the success of the SCALE-UP SELA program on a 10-point scale?
    - Why are you rating each as such?
6. On a scale of 1-10, with one being not at all, to what extent do you feel the program adequately prepares students for employment/ better pay? Please explain your rating.
7. Overall, how satisfied are you with the Scale-Up SELA programs? Why?
    - How satisfied are you with supports you received for implementing the grant?

Partners and Relationships

8. How were partners engaged throughout the program?
    - Who would you consider to be the college's most influential partner and in what way(s) have they been involved in grant activities? *(Specific employers, workforce system, specific philanthropic organizations, educators, etc.)*
    - Who would you consider to be the least influential and why?
9. Tell me what you have heard from employer partners about SCALE UP SELA completers.
10. What kind of feedback have you received from employers about the credentials earned?
    - How relevant do the employers feel the credentials are?

Looking Forward Discussion

11. What elements of the SCALE UP SELA program do you believe will be sustained beyond the grant?
    - Are there components that you feel *should* be sustained and why?
    - Tell me about any program elements that you feel should be scaled-up (i.e. expanded beyond the courses TAACCCT funded).
12. Looking to the remainder of the grant, what kinds of activities do you plan to accomplish with the time left?
13. Any additional thoughts about your SCALE UP SELA program or the SCALE UP SELA grant in general?

Data Retention Specialist Interview Facilitation Guide - 45 minutes

Looking Back Discussion

1. How has your role changed over the course of the grant?
2. Looking back on the grant as a whole, what were the most notable successes? Why?
3. What would you say were the most notable challenges? (i.e., what do you wish would have gone better?)
    - How were these challenges addressed?
4. What do you wish you would have known from the beginning of the grant? (i.e., what are some lessons that you learned from this grant process?)
    - Would you have used ETO given then chance? Why? Why not?
5. How to you think SCALE UP SELA grant has affected Delgado?
    - How do you think that the grant has affected institution capacity building?
6. How would you rate the success of the SCALE UP SELA program on a 10-point scale?
    - Why are you rating each as such?
7. Overall, how satisfied are you with the SCALE UP SELA programs? Why?

Program Implementation Discussion

8. Which element of the SCALE UP SELA program do you feel is most important/really drives positive student outcomes?
    - Which elements do you think were the least effective in driving student outcomes?

Looking Forward Discussion

9. Which elements of the SCALE UP SELA programs do you believe will be sustained beyond the grant?
    - Are there are components that you feel *should* be sustained and why?
10. Looking to the remainder of the grant, what kinds of activities do you plan to accomplish with the time left?
11. Any additional thoughts about your SCALE UP SELA program or the SCALE UP SELA grant in general?

Student Navigator Interview Facilitation Guide -60 minutes

Looking Back Discussion

1. How has your role changed over the course of the grant?
2. Looking back on the grant as a whole, what were the most notable successes? Why?
3. What would you say were the most notable challenges? (i.e., what do you wish would have gone better?)
    - How were these challenges addressed?

4. What do you wish you would have known from the beginning of the grant? (I.e., what are some lessons that you learned from this grant process?)
5. How to you think SCALE UP SELA grant has affected Delgado?
    - How do you think that the grant has affected institution capacity building?
6. How would you rate the success of each program on a 10-point scale?
    - Why are you rating each as such?
7. Overall, how satisfied are you with the SCALE UP SELA programs? Why?

Program Implementation Discussion

Student Supports

8. Which of the supports that you offer to students tend to be the most utilized? Which are the least utilized?
9. What are the challenges that students have faced with participating in the SCALE UP SELA program?
    - How do these challenges affect retention and completion?

Looking Forward Discussion

10. Which elements of the SCALE UP SELA programs do you believe will be sustained beyond the grant?
    - Are there are components that you feel *should* be sustained and why?
11. Looking to the remainder of the grant, what kinds of activities do you plan to accomplish with the time left?
12. Any additional thoughts about your SCALE UP SELA program or the SCALE UP SELA grant in general?

Instructors and/or Faculty Interview Facilitation Guide - 60 minutes

Looking Back Discussion

1. What has been your experience to date with the rollout of the SCALE UP SELA programs?
    a. Have you experienced any challenges? Please describe.
    b. Have you experienced any surprises? Please describe.
2. What do you like about the program?
    a. On a scale of 1-10, how would you rate the curriculum/equipment/program? Why are you rating that way?
3. What, if anything, would you change?
4. Looking back, how closely do the programs in place reflect your understanding of the grant plan?
5. Overall, how satisfied are you with the SCALE UP SELA programs? Why?

Program Implementation Discussion

6. What are the challenges that students have faced with participating in the SCALE UP SELA program?
7. How are employer partners involved in your programs?
    a. How did you build these partnerships?
    b. Who would you consider to be the college's most influential partner and in what way(s) have they been involved in grant activities? *(Specific employers, workforce system, specific philanthropic organizations, educators, etc.)*
    c. Who would you consider to be the least influential and why?

8. Tell me what you have heard from employer partners about SCALE UP SELA completers.
9. What kind of feedback have you received from employers about the credentials earned?
    a. How relevant do the employers feel the credentials are?
10. On a scale of 1-10, with one being not at all, to what extent do you feel the program adequately prepares students for employment/ better pay? Please explain your rating.
    a. To what extent, do you feel that the credentials that students earn are relevant for the job market in the area?
    b. What, if any, other courses, assessments, or credentials do you think could have led to better outcomes or could better prepare students for the job markets?

Looking Forward Discussion

11. Going forward, what changes do you plan to make to program delivery?
12. What elements/programs do you believe will be sustained beyond the grant?
    - Are there are components that you feel *should* be sustained and why?
13. Any additional thoughts about your SCALE UP SELA program or the SCALE UP SELA grant in general?

Career Developer Interview Facilitation Guide - 60 minutes

Looking Back Discussion

1. What is your role on the grant?
2. Looking back on the grant as a whole, what were the most notable successes? Why?
3. What would you say were the most notable challenges? (i.e., what do you wish would have gone better?)
    - How were these challenges addressed?
4. What do you wish you would have known from the beginning of the grant? (I.e., what are some lessons that you learned from this grant process?)
5. How to you think SCALE UP SELA grant has affected Delgado?
6. Overall, how satisfied are you with the SCALE UP SELA programs? Why?

Program Implementation Discussion

Job Placement and Readiness

7. What were the primary job readiness services that you offered to students? What went well? What didn't go well?
    - What was most impactful for getting participants employed, in your opinion?
8. What were the primary job placement supports? What went well? What didn't go well?
    - What was most impactful for getting participants employed, in your opinion?
9. How were partners actually engaged throughout the program for recruitment and/or placement purposes?
    - How did you build these partnerships?
    - Who would you consider to be the college's most influential partner and in what way(s) have they been involved in grant activities? *(Specific employers, workforce system, specific philanthropic organizations, educators, etc.)*
    - Who would you consider to be the least influential and why?
10. Tell me what you have heard from employer partners about SCALE UP SELA completers.

11. What kind of feedback have you received from employers about the credentials earned?
    - How relevant do the employers feel the credentials are?
12. What were the major challenges and barriers to connecting students to employment?
    - Specifically, in terms of job readiness, and job placement
13. On a scale of 1 to 10, with one being not at all, do you find that SCALE UP SELA participants are ready for the job market? Please explain your rating.

College Leadership Facilitation Guide - 30 minutes

Discussion Questions:

1. What has been your experience with the TAACCCT grant at Delgado?
2. Looking back on the grant as a whole, what were the most notable successes? Why?
    - Which programs are working well? Which are not? Why?
    - Which services do you feel were most successful? Which were least? Why?
3. What would you say were the most notable challenges? (i.e., what do you wish would have gone better?)
    - How were these challenges addressed?
4. What do you wish you would have known from the beginning of the grant? (I.e., what are some lessons that you learned from this grant process?)
5. How valuable are the programs of study to your college?
6. What programs do you believe will be sustained beyond the grant? Which specific elements of the programs that will be sustained?
    - Are there are components that you feel *should* be sustained and why?
    - Are there any structural changes that have occurred as a result of the grant?
7. Tell me about the extent to which you believe SCALE UP SELA staff are receiving the support they need (from the college and from MDC) to fully implement the program.
8. Overall, how satisfied are you with the SCALE UP SELA programs? Why?

Student Focus Group Facilitation Guide - 45 minutes

Discussion Questions:

1. How did you initially learn about this program?
2. What interested you most about it? (I.e., what factors encouraged you to enroll?)
3. Tell me about any supports (like testing or counseling) you have received.
    - What support services do you feel were most useful in helping you stay and complete your training program?
    - What support services do you feel were most helpful to you in terms of getting ready for a job and job placement? Why?
4. Tell me about your experience with your classes.
    - What do you like?
    - If you could change one thing, what would it be?
    - In what ways do you feel that the credentials you will earn through this program will help you get a job in the field?
5. On a scale of 1-10, how satisfied are you with the courses you are taking in the program? Tell me about that rating.
6. What will completing this program help you do? (probe re: jobs, continuing education)
7. What advice would you give a future student who was interested in enrolling in a program at this college?
8. Any additional thoughts about the courses you are taking?

Employer Partner Interview Facilitation Guide - 30 minutes

Discussion Questions:

1. Tell us about your company and the kind of work you do.
2. How you were initially introduced to Scale-Up SELA?
3. How you have been involved with Scale-Up SELA? (probe for contributions in terms of program design; curriculum development; recruitment; training; placement; program management; leveraging of resources; commitment to program sustainability)
    - Which areas of contribution do you feel are most likely to add to the success of the program? Could you talk more about these?
    - Were there any areas you expected and/or hoped to make a contribution to the program, but were unable to? Could you talk more about these?
4. On a scale of 1-10, with 1 being not at all, to what extent do you feel the program adequately prepares students for employment/ better pay? Please explain your rating.
    - To what extent, do you feel that the credentials that students earn are relevant for the job market in the area?
    - What, if any, other courses, assessments, or credentials do you think could have led to better outcomes or could better prepare students for the job markets?
5. How satisfied are you with your experience as a grant partner? Why?
6. How does your experience with Delgado on this grant compare to past experiences you've encountered with partners?
7. What can Delgado do to improve your experience with Scale-Up SELA?
8. Would you choose to be a program partner again?

Appendix B – Data Cleaning and Coding

The Outcome Evaluation Study aimed to isolate specific observed credit earning, completion, certification or credential earning, and employment effects that are associated with participation in Scale-Up SELA. Upon receipt of the final date, the Evaluation Team conducted data cleaning procedures that included:

Combining data files: The data received from Delgado Community College consisted of separate files for the comparison and treatment groups. Furthermore, within the treatment group, data was separated by cohort year as well as by for-credit or non-credit programs. Because of the variety of sources, relationships between the datasets had to be determined in order to merge all students into one set of comprehensive Delgado data, which includes 2,018 unique student records.

Creating summary variables: Data was combined into summary variables where appropriate. The following bulleted list describes how data within key variables was combined and cleaned.

- Employment was summarized into a single variable, regardless of whether it took place in the first or second year of the student's inclusion in the program. Only first-quarter employment was kept separate for additional analysis.
- The sum of credits and sum of credentials earned were used without regard to the semester or date the credits or credentials were awarded.
- Because there were so few students of any ethnic or racial background besides African American or White, all other races and ethnicities were included in an "Other" category.
- The total count of veterans in the sample was too small for inclusion in any analyses and records were not kept for all student groups. For example, most students in the for-credit comparison group were not listed as veterans but were employed by the U.S. military in military posts.
- Age, gender, and incumbent worker status were all well populated, and only zeros for age required replacement with "Unknown." Age, gender and incumbent worker status were known for about 95% of the sample.
- Program names, whether common or uncommon within the dataset, were grouped into broader categories so that meaningful comparisons could be made, even if not statistically tested. Major categories include Electrical, Welding, Industrial Maintenance, Pipefitting, and Tech 101/Core Plus.

Appendix C. Comparison Group Data Availability and Methodology Design

The Evaluation Team's analysis included both a treatment group of Scale-Up SELA students who were exposed to grant-funded programs or services, and a retrospective comparison group of Delgado Community College students enrolled in similar programs in the years immediately prior to Scale-Up SELA's implementation.

The Evaluation Team did not conduct statistical matching techniques such as propensity score matching (PSM) because there were not enough observations to create a matched sample that would have been statistically viable. A challenge with using a matched sample was that the cutoffs for statistical significance would be stricter under the assumptions that the matching reduces "noise" (i.e., variance) in the model and the spread of the hypothesized distribution would not have a substantial amount of randomness in it. With the sample size for this evaluation, decreasing from a few hundred cases would have an effect on the allowable degrees of freedom, and the "noise" would not be substantially reduced. Additionally, the test of significance becomes more stringent though there is not better information to offset the increase in the critical values for statistical testing.

Background characteristics (i.e., gender, race) were very similar for both the treatment and comparison groups. Since race and gender did not have a large impact on outcomes, it is assumed that they are not adding a notable amount of variance, so matching on them does not provide more useful information. Moreover, matching on program type was not feasible because there were not enough students in all of the programs and especially not within each of the four main categories (i.e., credit, non-credit, treatment, control). Accordingly, it was not appropriate to statistically match students within different programs. The Evaluation Team found evidence for significant impact from the treatment (i.e., Scale-Up SELA program participation) even without using PSM, (see Key Outcomes Findings section for details). These finding support the Evaluation Team's rationale for not using PSM or other statistical matching procedures.

The following tables and charts show the differences between comparison and comparison groups on demographic variables and for key variables of interest.

Table 22. Demographic Variables in Treatment and Comparison Groups

	Comparison	Treatment
Number	944	1074
Average Age (SD)	29.3 (11.4)	32.6 (11.1)
Percent Male	94.8%	89.7%
Percent Black	62.2%	65.8%
Percent White	23.7%	17.9%
Number Credit	855	404
Number Non-Credit	89	670
Number Core Plus	27	202
Percent Incumbent	Not Avail.	53.4%

Table 23. Program Enrollment in Treatment and Comparison Groups

Program	Comparison	Treatment
Core Plus	27	222
Tech 101	193	50
Electrical	287	226
Industrial Maintenance	135	248
Pipefitting	N/A	74
Precision Machining	32	13
Welding	270	241
Total	**944**	**1,074**

Appendix D – Program Impact Table

Credit Programs

Table 24. Credit Program Impact Table

Program(s)	Course(s) Impacted	Purchases	Curriculum	Enhancement	Services
Tech 101 (Various Programs)	Tech 101			FA 15: Pilot of NCCER Connect online platform SP 16 - FA17: Hybrid & Team Teaching	Intrusive Advising Academic & Employment Assistance Job Readiness
Residential Electrician Commercial Electrician Small Industrial Electrician	Various	FA 16 (Aug): Lab Supplies	Revision for acceleration	PLA - Challenge Exams Journeyman Electrician Exam Preparation course was added as an Elective in SP 18	Intrusive Advising Academic & Employment Assistance Job Readiness
Shielded Metal Arc Welding (SMAW) Gas Tungsten Arc Welding (GTAW) Flux Core & Gas Metal Arc Welder (FCAW & GMAW)	Various	FA 15 (Sept), FA 16 (Aug): Supplies & Equipment	Development of Technical Competency Area (TCA): FCAW & GMAW AW	PLA - Challenge Exams AWS GTAW Welder qual. for several welding instructors to allow them to teach to standard of AWS certification.	Intrusive Advising Academic & Employment Assistance Job Readiness
Industrial Maintenance	Tech 101				Intrusive Advising Academic & Employment Assistance Job Readiness
Precision Machining	Various	FA 15 (Forming & Shaping): Equipment	Revision for acceleration		Intrusive Advising Academic & Employment Assistance Job Readiness
Process Instrumentation & Controls (PIC)	All	FA 15, FA 16: Equipment	Revision to combine elements of Process Technology(P-Tech) and Instrumentation curriculum	OSHA 30	Intrusive Advising Academic & Employment Assistance Job Readiness

Non- Credit Programs

Table 25. Credit Program Impact Table

Program(s)	Course(s) Impacted	Purchases	Curriculum	Enhancement	Services
Core Plus	NCCER Core	Supplies	Revision from Core to Core Plus. Core Plus combines NCCER Core, OSHA10, an introduction to advanced manufacturing/energy trades and employs the use of contextualized learning which incorporated team teaching approach based on I-Best model.	Team Teaching OSHA 10	Intrusive Advising Academic & Employment Assistance Job Readiness
Electrical	NCCER Core Electrical Level 1 (various cohorts) Electrical Level 2 (various cohorts)	FA 16, SP 18: Supplies		Core Plus	Intrusive Advising Academic & Employment Assistance Job Readiness
Journeyman Electrician Exam Preparation		SP 16: Instructional Materials	Development		Intrusive Advising Academic & Employment Assistance Job Readiness
Industrial Maintenance	NCCER Core Industrial Maintenance Level 1			Core Plus	Intrusive Advising Academic & Employment Assistance Job Readiness
Millwright	NCCER Core			Core Plus	Intrusive Advising Academic & Employment Assistance Job Readiness
Pipefitting	NCCER Core Pipefitting Level 1 (various cohorts) Pipefitting Level 2 (various cohorts)			Core Plus	Intrusive Advising Academic & Employment Assistance Job Readiness

Welding	NCCER Core Welding Level 1 (various cohorts)	SP 16, FA 16, SP 17: Supplies		Core Plus	Intrusive Advising Academic & Employment Assistance Job Readiness
Aluminum Welding	All	SU 17: Supplies	Development		Intrusive Advising Academic & Employment Assistance Job Readiness
Hispanic Welding				Team Teaching in Core (Spanish)	Intrusive Advising Academic & Employment Assistance Job Readiness
Praxair Welding					Intrusive Advising Academic & Employment Assistance Job Readiness

Appendix E – Equipment List

Table 26. Scale-Up SELA Equipment List

Item Name	Description/Specifications	Qty	Purpose of acquisition
AMATROL-SIEMENS PLC learning system	Portable PLC Combined Troubleshooting Learning System - Siemens S71200	4	For our PTECH program-A portable "trainer" that teaches programmable logic controller using the trainer and is accompanied by software for students which includes input/output devices as well as troubleshooting.
Lincoln K4280-1-4 pack rack of Flextec 350 welders	multi-process welder. Flextec Power sources support multiple weld processes: MIG, TIG, Stick, Gouging, FCAW & Saw.	2	To assist with increasing capacity of the Welding Program.
Pump Demonstration Training Model	Desk to model mounted on rigid base with acrylic see through reservoir and volute (For new Process Instrumentation and Controls program)	1	PIC - Used to train operators on the workings of centrifugal pumps, Cavitations and other pumping phenomena can be demonstrated by manipulating the suction and discharge valves and the pump RPM's.
LUBE	Lubrication training unit (For new Process Instrumentation and Controls Program)	1	PIC - This centrifugal pump lubrication system enables students to see how the lube system works and also visibly shows gear lubrication in an aluminum and clear acrylic housing.
80 Ton Iron Worker	Haco Multi80 ton Iron Worker for shearing, notching, hole punching and forming of steel.	1	To assist with increasing capacity of the Precision Machining Program.
Guildweld VR Station with accessories.	Simulated portable welding equipment	3	To assist with increasing capacity of the Welding Program.