Logistics Engineering Technology Work Study: Year 2 Interim Evaluation Report

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Executive Summary

The emerging logistics operations industrial sector in the Central Ohio Region is driving a rising demand for employees with strong integrated technical skills in supply chain management, engineering technology, and information technology. In response, a team at Columbus State Community College (Columbus State), with support from a National Science Foundation Advanced Technology Education (NSF ATE) grant, has created a Logistics Engineering Technician Work Study (LET WS) offering that provides an academic pathway option for students and adult learners. The current NSF ATE-funded project adds a Work Study component option to the LET Pathway that will replicate the successful NSF ATE-funded Modern Manufacturing Work Study (MMWS) program.

In this second year, the LET WS project team has continued to conduct effective outreach activities to inform students, parents, and educators about the LET field and Columbus State's LET/LET WS programs, has built partnerships with additional industry partners, has successfully developed and implemented a process for connecting LET WS and work study employers, and developed a series of workshops to help students develop effective resumes and have successful interviews. The 2018 integration of the LET WS and MMWS programs and the creation of a new institutional office to oversee Work Study programs at Columbus State were important institutional changes that facilitated the implementation of the project team's efforts

Recommendations are provided at the end of the report and include suggestions related to the impact of outreach efforts on students' decisions to enroll in the LET degree program, assessing the LET WS study positions through the experiences of students and employers, and increasing the pipeline of qualified LET technicians through the Prior Learning Assessment (PLA) process.

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Background

The emerging logistics operations industrial sector in the Central Ohio region is driving a rising demand for employees with strong integrated technical skills in supply chain management, engineering technology, and information technology. In response, a team at Columbus State Community College (Columbus State), with support from a National Science Foundation Advanced Technology Education (NSF ATE) grant, has created a Logistics Engineering Technician (LET) Pathway that provides academic pathway options for students and adult learners. The current NSF ATE-funded project adds a Work Study component option to the LET Pathway that replicates the successful NSF ATE-funded Modern Manufacturing Work Study program.

The plan for the development of the LET Work Study (LET WS) component includes the following four (4) project objectives:

1. Develop a Work Study Model in LET - The proposed expansion provided through this proposal will integrate a work study component into the career pathway for Logistics Engineering Technicians.
2. Develop a LET WS Summer Institute for high school graduates on careers in logistics engineering operations, with a classroom component and site visits/shadowing to regional leaders in supply chain management.
3. Develop a bridge Program with Prior Learning Assessment (PLA) for adult learners to identify knowledge gained outside of the traditional classroom and evaluate it for college credit
4. Develop a Logistics Engineering Technology Laboratory for hands-on application - The PIs will develop an automated work cell to simulate a smart conveyor used in regional warehouses

This report provides an evaluative summary of the LET WS project in its second year of development.

Purpose and Design of the Evaluation

The Rucks Group, LLC began working with the Columbus State project team in 2014 as the external evaluator on the LET degree program project (NSF Award Number 1400452) and joined the LET WS project when awarded in 2017.

The evaluation has a two-fold purpose: 1) to capture information regarding the activities of the project (i.e., formative evaluation); and 2) to assess the outcomes of the project (i.e., summative evaluation). The logic model in Appendix A provides a pictorial description of the project regarding inputs, planned activities, and expected outcomes.

The evaluation is guided by the following four (4) evaluation questions:

1. How effectively is the project being planned and implemented? How have challenges been addressed?

2. How effective are the outreach strategies that are designed to increase awareness of LET careers and pathways among high school educators, students & parents, and veterans?

3. To what extent has the PLA module effectively correlated attainment of learning outcomes to PLA credit?

4. In what ways have students benefited from the Work Study component? In what ways have industry partners benefited from the Work Study component? To what extent has the Work Study component contributed to students' knowledge and skills needed for positions in LET? To what extent has it improved their ability to find employment?

This Year 2 interim evaluation report describes the important successes and challenges related to these efforts particularly with respect to evaluation questions 1 to 3. The report concludes with recommendations. Year 3 will provide opportunities to collect information that will provide insights into evaluation questions 3 and 4.

Findings

Evaluation Question #1 - How effectively is the project being planned and implemented? How have challenges been addressed?

The team has either completed or is on track to complete, each of the activities that were planned during this initial year. A full list describing each planned activity and its status is provided in Appendix B. The primary efforts centered around the development of work study employer partnerships and the recruitment and preparation of candidates for the LET WS positions. The activities for each of these efforts are described in more detail below.

<u>Engaging with industry to develop work study employer partnerships and advisory relationships</u>

In its first year the LET WS team established relationships with four regional industry employers who had indicated an interest in partnering with Columbus State to provide students with a work study experience. After the second year, the project team had a commitment from nine regional employers who signed on to offer works study positions. These nine employers included the following:

- Abercrombie & Fitch
- Allied Mineral Products, Inc.
- ATS Ohio
- Autotool Inc.
- Franke Foodservice - Sertek
- FST Logistics
- Hirschvogel Incorporated
- Rimrock Corporation
- Worthington Industries

The project team also continued its efforts to seek input and guidance from government and industry partners through the industry advisory and steering committee. The composition of the advisory committee includes five industry partners and the Columbus Area Chamber of Commerce. The names and locations of these industry partners along with the names and locations of the work study employers is provided in Appendix C.

An industry advisory committee meeting was held on October 12, 2018, to engage with employers in central Ohio to obtain feedback on the LET WS program. Nine individuals representing five employers and the Columbus Chamber of Commerce attended. The meeting started with a brief overview of goals and plan for the LET WS project and then moved quickly into a facilitated semi-structured discussion to identify opportunities for improving alignment between the project and their specific needs. The meeting also provided an opportunity to identify and seek a commitment from employers to provide placement opportunities for students in the LETWS program.

Recruiting and preparing candidates for the LET WS position

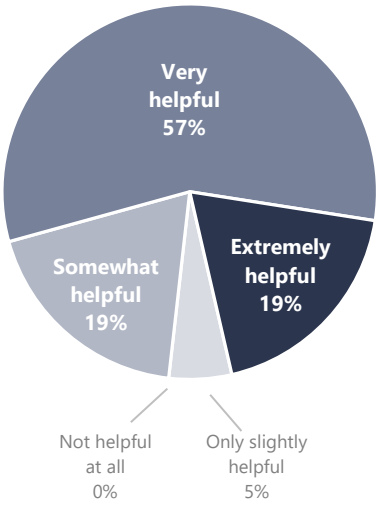
The LET WS team developed and implemented a work study placement process that included the recruitment of interested students from the LET WS program, opportunities for students to identify preferred employers, and opportunities for employers to identify candidates who might be a good fit for their needs. Additionally, Columbus State sponsored a "Meet the Company" which provided 38 students from the LET and Modern Manufacturing programs with an opportunity to network with employers before their interviews. This process began in February 2019 and culminated in interviews that occurred from March 11 to March 14, 2019. During the latter part of March and through April, Columbus State will distribute a link that companies will use to submit names of students selected for employment offers.

To help students prepare for the interviews, the project team collaborated with the Career Services department at Columbus State to host three career readiness workshops for LET WS students. The primary goals of the workshop series were to increase students' job readiness and prepare them well for the process of applying for and obtaining one of the LET WS internship positions.

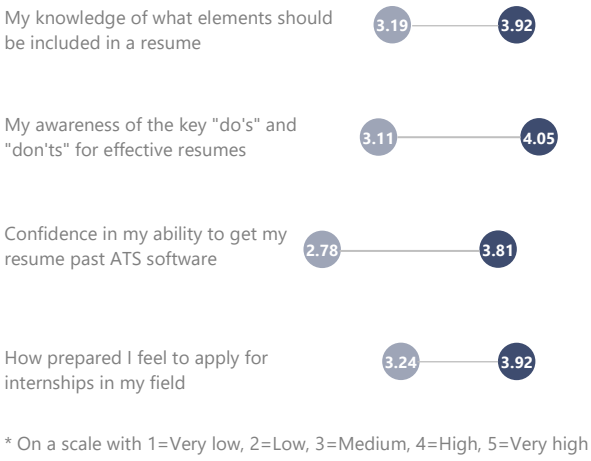
The topics for the career readiness workshops included the following: 1) Resume Workshop, 2) Company Research Workshop, and 3) Interview Preparation Workshop. Thirty-nine students attended the Resume Workshop, 41 attended the Company Research workshop, and 48 students attended the Interview Preparation Workshop.

Students completed a pre and post knowledge quiz and survey for the Resume Workshop and the Interview Preparation Workshop. Most students rated these workshops as being "Very helpful" or "Extremely helpful." Self-reported levels of awareness and knowledge related to the objectives of the workshops also increased for more students. Also, performance on every knowledge-based quiz item also increased from pre to post workshop. The infographics that follow in Figure 1 provide more a more detailed picture of these results. The results from all questions on the pre and post knowledge quiz and survey for the resume workshop and interviewing workshop are provided in Appendix D and E respectively.

Most students gave the Resume Workshop an overall rating of "Very helpful" or "Extremely helpful" (N=37)

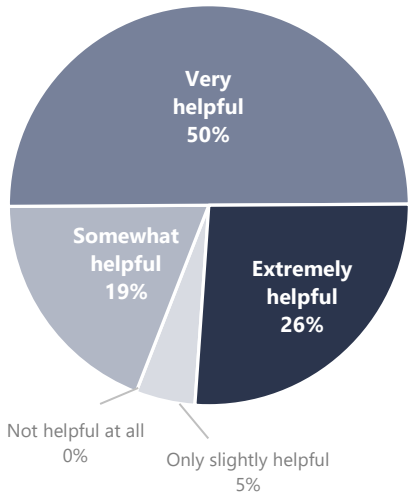


Mean self-ratings* for each learning objective from the Resume Workshop improved from pre to post (N=37)

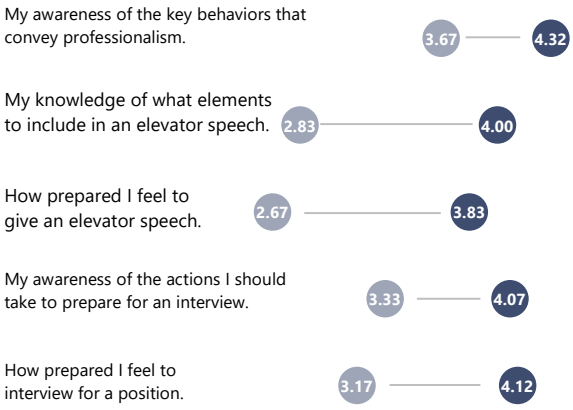


* On a scale with 1=Very low, 2=Low, 3=Medium, 4=High, 5=Very high

Most students gave the Interviewing Preparation Workshop an overall rating of "Very helpful" or "Extremely helpful." (N=48)



Mean self-ratings* for each learning objective from the Interviewing Preparation Workshop improved from pre to post.



* On a scale with 1=Very low, 2=Low, 3=Medium, 4=High, 5=Very high

Figure 1. Summary results from the resume and interviewing workshops.

Evaluative Question #2: How effective are the outreach strategies that are designed to increase awareness of LET careers and pathways?

The LET WS project team continued to engage in numerous outreach activities targeting students, parents, and educators. The major outreach activities that included a large LET components are described in this section along with evaluation findings from those events.

Smart Columbus – Smart Careers

On May 21, 2018, Columbus State Community College hosted an evening event for current and prospective students called Smart Columbus, Smart Careers that provided information and opportunities for discussion on careers and educational pathways in industries that align directly with the Smart Columbus initiative including logistics & engineering technologies, alternative energy automotive, and data analytics. At the end of the event, participants were asked to complete a paper-pencil survey designed to measure their reactions and the extent to which the goals of raising awareness and increasing knowledge were achieved.

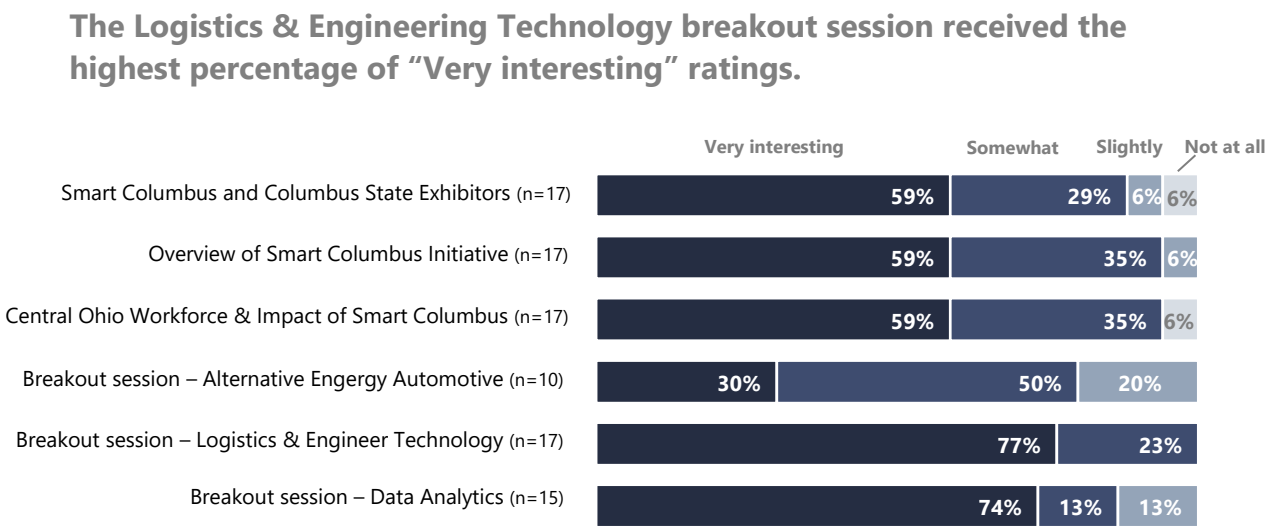


Figure 2. Participant frequencies when asked the question, "Overall, how interesting was each of the following activities for you?"

The reported survey items that follow used a counterfactual design to assess changes in awareness levels regarding facts related to the fields highlighted during the bus tour (Mueller, Gaus, & Rech, 2014). With this design, participants were asked to first consider and rate their level of awareness before the event, and then rate their level immediately after the event. Data from such counterfactual designs is believed to be of higher validity compared to traditional pre- and post-designs because individuals tend to overestimate knowledge levels in the absence of a defined standard (Kruger & Dunning, 1999).

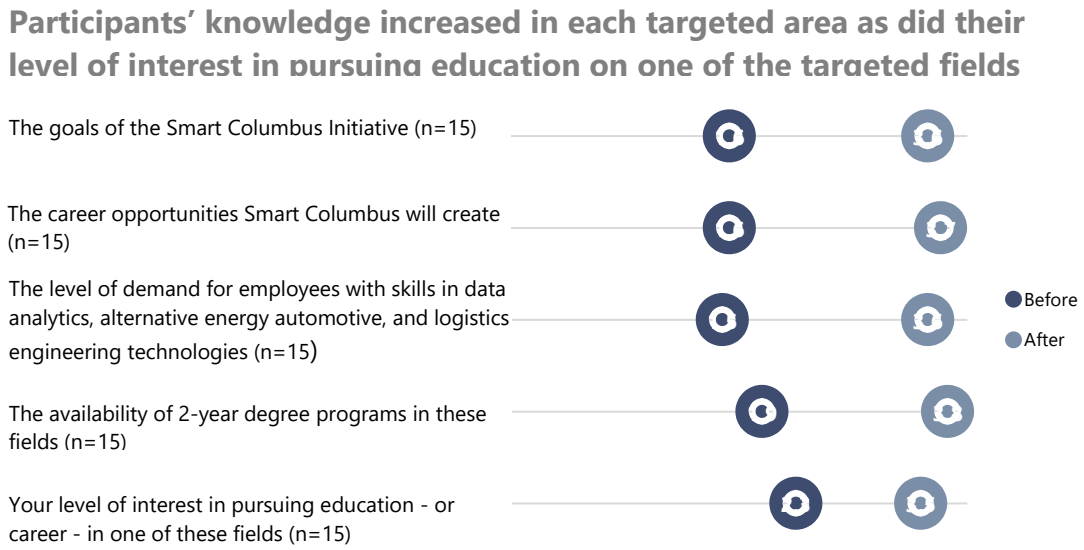


Figure 3. Mean responses about participants' awareness about Smart Columbus both Before and After the event took place, a scale of 1 (Not Aware) to 4 (Fully Aware).

LET Early College Experience

Columbus State offered the LET Early College Experience (camp) in Years 1 and 2 of the project. The LET camp is designed to expose high school students to LET with the goals of increasing students' interest in the field and the likelihood that they would consider LET as a potential career Twenty-two students were recruited to attend the camp offered in June of 2017 (i.e., Year 1). While this was a good showing, the project team decided to recruit a larger group of students to justify the investment of time and money. During Year 2 the project team boosted their recruitment efforts for the 2018 Early College Experience camp by reaching out to more administrators and educators in the region who then helped to pass along the information to students and parents. As a result of these efforts, the project team recruited a total of 34 students to attend the 2018 camp which was an increase of nearly 55%.

Camp attendees completed brief counterfactual surveys each day and a final survey at the end of the three-day event to assess changes in their attitudes and awareness regarding LET as a potential educational and career path. Counterfactual surveys offer an alternative to traditional pre-post designs to measure the impact of an intervention (e.g., a workshop). The items included on the summer camp surveys were modeled after a nationally sponsored questionnaire designed to assess attitudes towards manufacturing and related careers (Deloitte Development, LLC and The Manufacturing Institute, 2014).

The mean ratings for the items included in the final survey at the end of day three for both the 2017 and 2018 camps are provided on the page that follows.

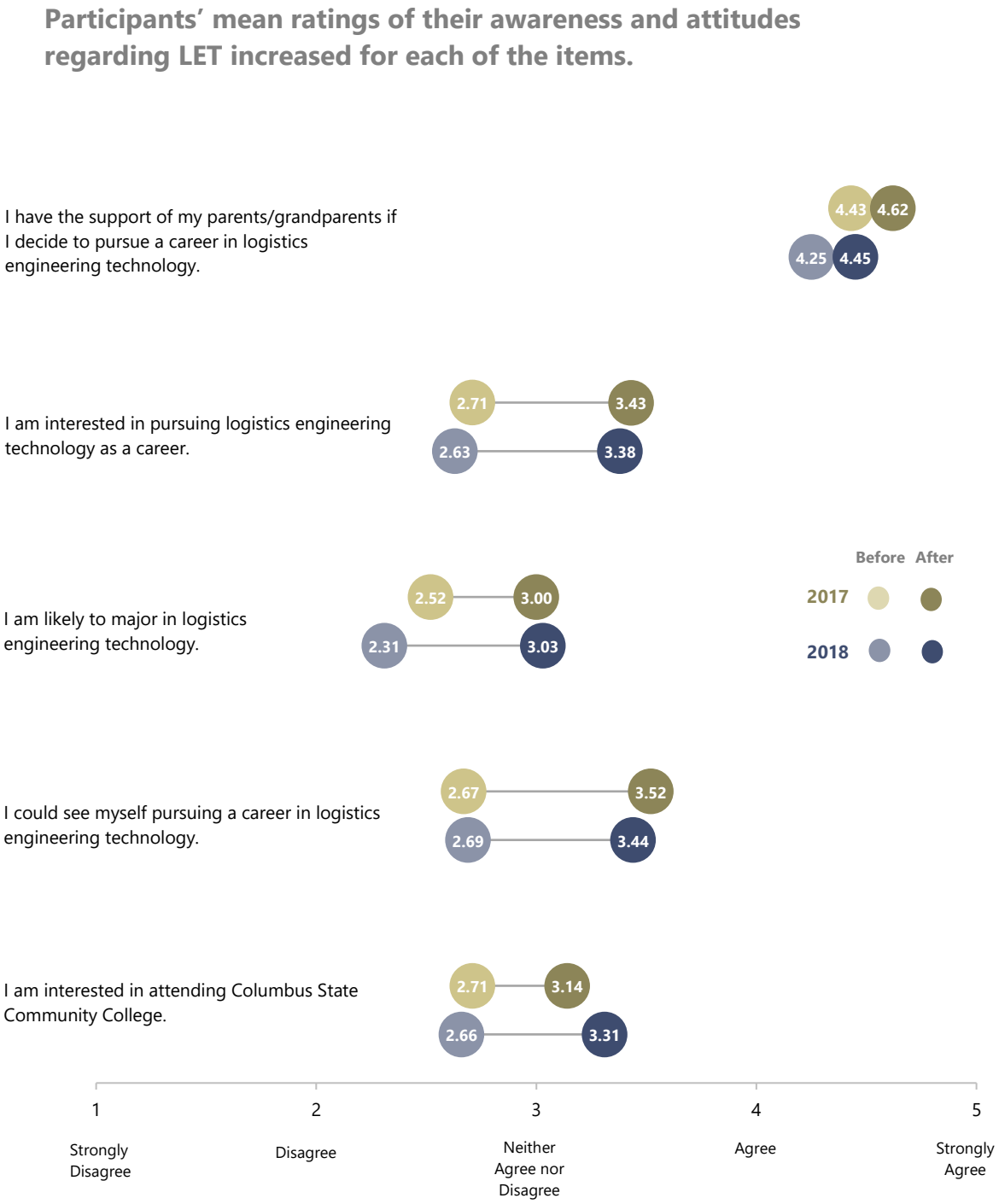


Figure 4. Mean participant response to the question, "For each of the following, please indicate how you would have rated your agreement on the item BEFORE the Camp started and then how you now rate your level of agreement AFTER the Camp has ended." N=22 for 2017 and N=34 for 2018.

On the items "I am interested in pursuing LET as a career" and "I could see myself pursuing a career in LET" there was a statistically significant shift from between "Disagree" and "Neither Agree nor Disagree" to between "Neither Agree nor Disagree" and "Agree" for across both years. This finding should also be interpreted as a practically significant difference too because it shows a clear shift away from disagreement towards agreement. Deciding on a career is a big decision and most high school students are either completely undecided about their career path or are considering a wide range of options. Consequently, one would not realistically expect extensive shifts in attitudes that would be reflected in higher levels of agreement.

These students, however, are getting close to the point at which they will need to decide on their program or major area of study for their post-secondary education. Students' agreement ratings to the question "I am likely to major in logistics engineering technology" did shift away from "Disagree" even if it did not shift all the way to "Agree." The shift away from "Disagree" should be interpreted as a practically significant change because this question asked about a specific behavioral intent (i.e., majoring in LET) and one would expect participants to express more uncertainty compared to questions asking about attitudes (e.g., interest in LET as a career). The fact that there was movement away from disagreement towards a more neutral attitude should be interpreted as a positive outcome because it indicates that some students' attitudes shifted into a better position to be moved by additional information about LET.

The support of parents is likely to be an important factor regarding the pursuit of LET as a career. A given student might have a positive image of the field, a strong interest, and a belief in their abilities but – lacking supportive parents – might decide to select a different path. Mean agreement ratings in response to the item "I have the support of my parents if I decide to pursue a career in LET" were in the "agree" to "strongly agree" range for both years suggest that this would not be an issue for these students.

Several open-ended questions were included in the counterfactual surveys administered during the 2017 and 2018 summer camps to gain a better understanding regarding what participants observed and learned that was particularly impactful. Responses to these open-ended questions from 2017 and 2018 were thematically coded with the most commonly mentioned themes per question reported in Table 1.

Question	Response theme	Freq.* 2017 (N=22)	Freq.* 2018 (N=33)	Illustrative quote
What was the most interesting part of the campus tour?	Seeing the areas where students can gather	7	2	"I really like how there were a lot of places that you can use/study at."
	Seeing the various programs and services provided for students	3	4	"Being able to see the campus and the opportunities here."
	The food trucks	-	4	"They had a place that had a pizza truck."
What had the largest impact on your attitude towards LET as a major/career? (Camp overall)	Distribution Center Tours	7	7	"The Boars Head tour helped."
	Learning about field from people in industry	7	5	"Information on the basics of LET and careers in the field."
	Learning about the technology aspect	2	3	"Technology aspect, robots were most interesting."
	Campus tour	6	8	"Being on campus going to classes and seeing a bit of college life."
What had the largest impact on your attitude towards attending CSCC? (Camp overall)	Learning that it's relatively inexpensive but still high quality.	-	10	"How inexpensive it is and still has great programs."
	CCP - ability to transfer credits to 4-year	-	3	"CCP - ability to transfer credits to 4-year."
	Atmosphere/people on campus	2	2	"The people and work ethic present in the school."
	Availability, quality and uniqueness of LET Program	2	2	"Just knowing the LET Program is available."

* The number of participants responding with a statement corresponding to each theme

Table 1. Top themes in response to open-ended questions from the 2017 and 2018 LET Early College Experience camp.

Regarding what had the largest impact on their attitudes toward LET as a major or career, students from both years most commonly mentioned the visits to distribution centers such as Abercrombie and Fitch, learning about LET from people in the field, and learning about the technological components of LET. These results provide good evidence in support of the overall design of the program which requires a significant amount of time and effort to plan, but it appears to be worth the investment.

The campus tour also appears to have been time well-spent; several students from both years mentioned it as having the largest impact on their attitude towards attending Columbus State. Many respondents from the 2018 camp also mentioned that learning about the relative cost of the program and its quality had the largest impact on their attitudes towards attending Columbus State. Future events and programs targeting high school students should certainly continue to stress this point, particularly in combination with the fact that credits earned at Columbus State can be transferred to a 4-year institution (i.e., CCP).

Evaluation question #3 To what extent has the PLA process effectively correlated attainment of learning outcomes to PLA credit?

The project team has developed – and is actively offering - an option for adult learners to request and receive degree credit for courses and even internship positions that align with the learners' prior work or experiences.

A screening process for determining if an individual is eligible to receive PLA credit has been established. To be eligible for PLA credit a student must meet one or more of the following criteria:

- Has five or more years of supervisory or managerial experience in a Logistics or Supply Chain Management (or related) position and/or company;
- Has ten or more years' experience in a Logistics or Supply Chain Management (or related) position and/or company;
- Has relatable military experience; and/or
- Studied Logistics or supply chain management at a previous institution but have not yet received formal credit.

The PLA determination processes for receiving course credit and internship credit differ. The decision flow process for each is shown in Appendix F.

Outreach is being conducted to create awareness of the PLA opportunity for the LET WS program. The availability of this PLA option is being shared with adult learners through fliers posted in academic building and email notifications. So far one individual has received course credit through this process.

As more students apply for and receive course credit there will be opportunities to gather evidence as to whether the process has effectively correlated attainment of learning outcomes to PLA credit. These findings will be included in the Year 3 report.

Recommendations

The project appears to be on track and moving forward as expected. In this second year, the LET WS project team has continued to conduct effective outreach activities, built partnerships with additional industry entities, successfully developed and implemented a process for connecting LET WS and WS employers, and developed a series of workshops to help students develop effective resumes and have successful interviews. The following recommendations have been discussed in collaboration with the project team.

<u>The impact of outreach efforts on students' decisions to enroll in the LET degree program</u>

The project team's outreach efforts are effectively increasing awareness of the LET field and Columbus State's educational and training opportunities. It is reasonable to expect that some students who decide

to enroll in Columbus State's LET degree program in the coming years will have been influenced by one of these events directly, or through a teacher who participated. Being able to show the effect of outreach efforts on students' decisions to enroll would provide strong evidence for the importance of continuing the more impactful outreach efforts after the funding period. We recommend that the project team establish a standard process for determining how each incoming student learned about the program and the extent to which a specific event or experience influenced their decision to enroll. This objective could be accomplished by adding a required question to the enrollment application or adding a question to the evaluation for one of the required courses.

Assessing the LET WS study positions through the experiences of students and employers

Three or four students will be starting their year-long LET WS positions in May of 2019. These placements present an opportunity for the project team to obtain quick and deep insights for the continuous improvement of the LET degree and LET WS programs. We recommend an experiential case study approach which would include the periodic use of structured interviews, or focus groups, to obtain information from the perspective of both students and employers regarding the perceived benefits of the experience and would also reveal opportunities for improving the design and implementation of the LET WS program.

Increasing the pipeline of qualified LET technicians through the Prior Learning Assessment (PLA) process

The PLA process is an important component of this project because it provides a feasible opportunity for non-traditional students, incumbent workers, and veterans to earn the LET degree and expand their professional opportunities. Also, these individuals typically have more life experience and have developed a broader range of skills than traditional students which would make them particularly strong candidates for LET positions. Consequently, the PLA process could play an important role in more quickly increasing the pipeline of highly qualified LET technicians. An effective PLA process is now in place and has already granted course credit to one student. Current promotion efforts have been mostly localized to the campus population. We suggest that the project team work to identify more ways to promote and advertise the PLA option more broadly, particularly to incumbent workers and veterans. In addition, for students who are granted course credit through this process, it will be important to monitor their WS positions to ensure that they truly have the required knowledge and skills for the position. The previous suggestion to assess the experiences of WS students and employers would be the best approach for determining whether the PLA process is working as intended.

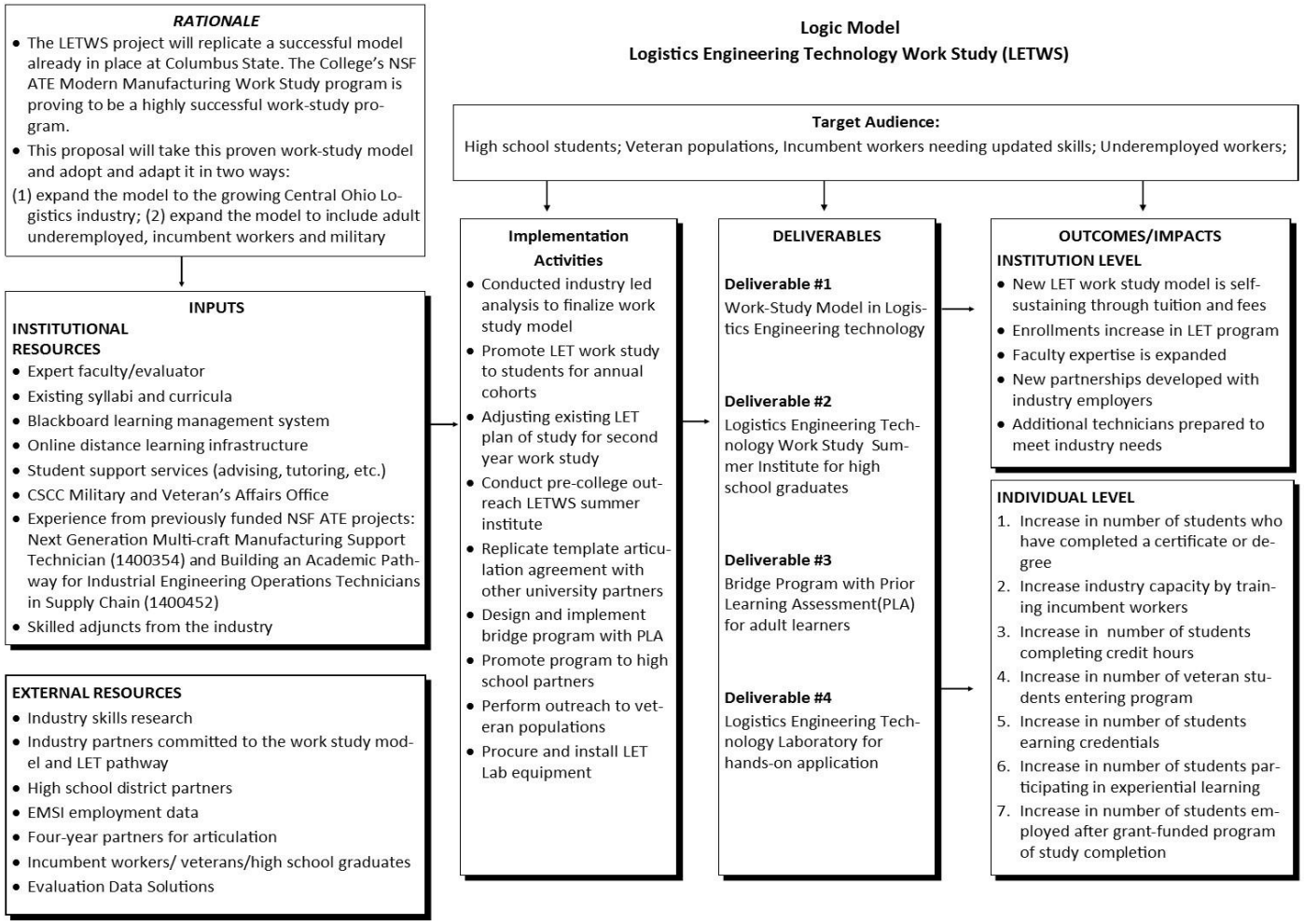
References

Kruger, J., & Dunning, D. (1999). Unskilled and unaware of it: How difficulties in recognizing one's own incompetence lead to inflated self-assessments. *Journal of Personality and Social Psychology*, 77, 1121–1134.

Mueller, C. E., Gaus, H., and Rech, J. (2014). The counterfactual self-estimation of program participants: Impact assessment without control groups or pretest. *American Journal of Evaluation*, 35, 8-25.

Appendices

Appendix A - Logistics Engineering Technology Work Study (LET WS) Logic Model



Appendix B - Major Project Activities and Status

Major Implementation Project Activities for Year 1	Target time frame	Activity Status
Focus existing Industry Advisory Committee on work study model	7/1/2017 to 9/30/2017	Committee fully briefed at kick-off in July 2017. LETWS update provided at February 6, 2018 meeting.
Recruit potential WS candidates from current pool of students enrolled in the LET degree program	9/30/2018 to 3/31/2018	Interviews were conducted, and one student has been selected.
Leverage experience from manufacturing grant to design for logistics work study students	7/1/2017 to 6/30/2018	On-going
Establish pilot employer partners	1/1/2018 to 9/30/2018	Completed
Develop articulation agreement with Ohio University	7/1/2017 to 6/30/2018	Completed
Design and deliver the LET Summer Institute and Student Sumer Camp	10/1/2018 to 6/30/2018	Both delivered during summer of 2018.
Create outreach strategies to promote the LET pathway to new students	7/1/2017 to 12/31/2018	Many activities have taken place (see data under evaluation question 2). Additional activities already scheduled for remaining of 2018.
Design PLA protocol and determine PLA assessments	7/1/17 to 6/30/18	Completed
Pilot PLA module	7/1/17 to 6/30/18	Completed
Procure equipment – Conveyer, Photo recognition, RFID, etc.	7/1/17 to 6/30/18	Conveyer has been acquired. Rest is in-process.
Align project to DOT Smart Cities Project	7/1/17 to 6/30/18	Most team members have attended SMART cities presentation

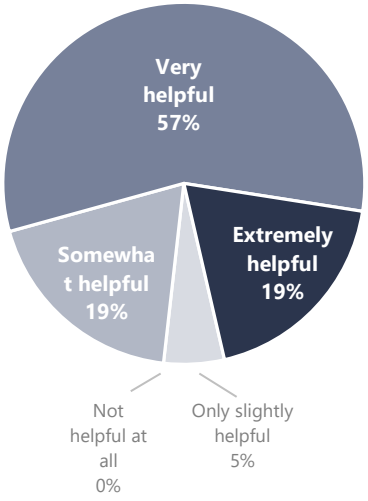
Appendix C - LET Work Study Industry Partners through Year 2

Abercrombie & Fitch Employer New Albany, OH Consultant and work study employer	**Rimrock** Employer Columbus, OH Consultant and work study employer
Allied Mineral Products Employer Columbus, OH Consultant and work study employer	**Worthington Industries** Employer Columbus, OH Consultant and work study employer
ATS Ohio Employer Lewis Center, OH Consultant and work study employer	**Ascena Retail Group** Employer Pataskala, OH Advisory and steering committee
AutoTool Inc. Employer Plain City, OH Consultant and work study employer	**Columbus Chamber of Commerce** Government Organization Columbus, Ohio Advisory and steering committee
Franke Foodservice- Sertek Employer Columbus, OH Consultant and work study employer	**G&J Pepsi-Cola** Employer Columbus, OH Advisory and steering committee
FST Logistics Employer Columbus, OH Consultant and work study employer	**Honda of America Mfg, Inc.** Employer Marysville, OH Advisory and steering committee
Hirschvogel Inc. Employer Columbus, OH Consultant and work study employer	**Honda Logistics** Employer East Liberty, OH Advisory and steering committee
Spartan Logistics Employer Columbus, OH Consultant and work study employer	**ODW Logistics** Employer Columbus, OH Advisory and steering committee

Appendix D - LET Career Readiness Program–Resume Workshop - Survey Results

37 students completed a pre-post quiz and a post-workshop evaluation

Most students gave the workshop an overall rating of "Very helpful" or "Extremely helpful"



What students learned that was most helpful

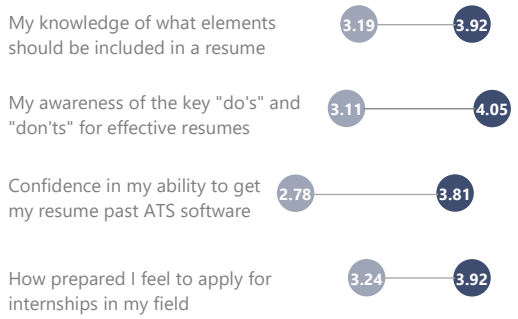
- What not to do or include (12 students)
- How to write a summary of qualifications (7)
- Which fonts to use or not use (6)
- What ATS is and how to circumvent (5)
- How quickly employers review resumes (4)
- How to create a better resume (4)
- What experience as skills to include (3)
- How to organize a resume (2)

Changes students recommended

- More time – slower pace (3)
- Other (7)
  - Schedule sooner to allow more time for resume review
  - Less audience participation
  - Provide templates
  - Put ATS on a slide
  - Different time
  - More desk space for computer
  - Water fountain

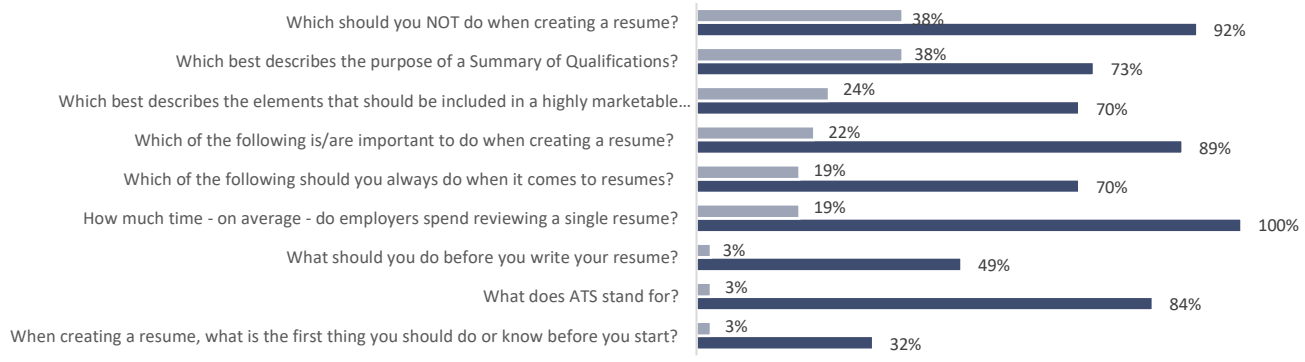
Every student's test score improved from pre to post workshop with an average increase of 54%

Mean self-ratings* for each learning objective improved from pre to post workshop



* On a scale with 1=Very low, 2=Low, 3=Medium, 4=High, 5=Very high

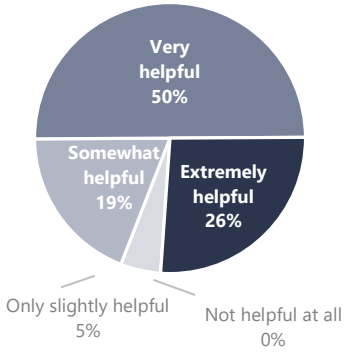
Mean scores for each test item improved from pre to post workshop



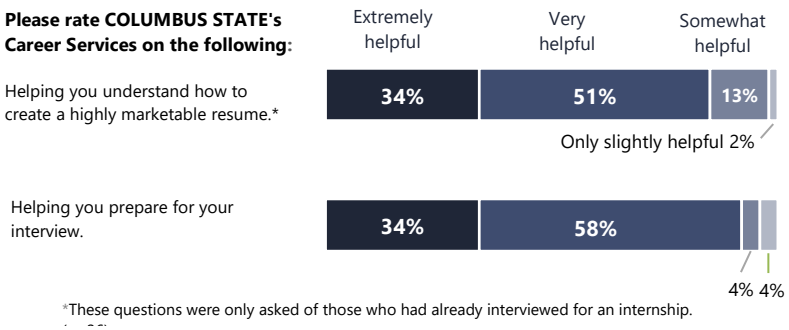
Appendix E - LET Career Readiness Program – Interviewing Workshop – Survey Results

48 students completed a pre-post quiz and a post-workshop evaluation survey

Most students gave the workshop an overall rating of "Very helpful" or "Extremely helpful."



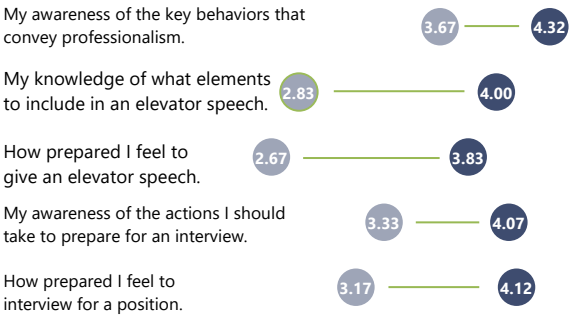
Most students rated COLUMBUS STATE's Career Services as being "Very helpful" or "Extremely helpful."



*These questions were only asked of those who had already interviewed for an internship.

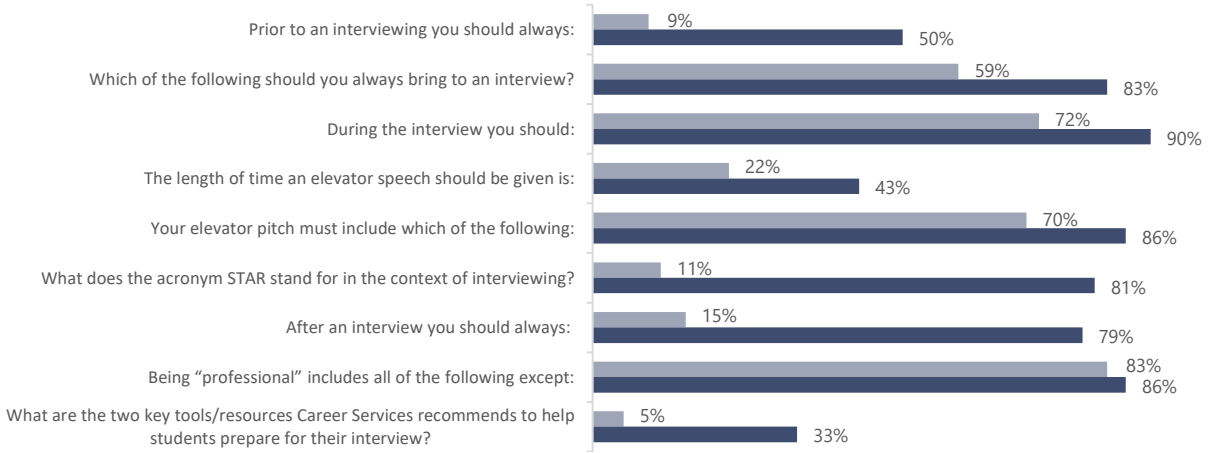
Every student's test score improved from pre to post workshop with an average increase of 33%.

Mean self-ratings* for each learning objective improved from pre to post workshop.



* On a scale with 1=Very low, 2=Low, 3=Medium, 4=High,

Mean scores for each test item improved from pre to post workshop



Learning about elevator speeches was mentioned by most participants as the most helpful thing they learned at the workshop

Theme (# endorsing)	Illustrative quote
Elevator speech (23)	The importance of the elevator speech.
The importance of thank you-letters (4)	Sending thank-you letters after interviewing.
Answering interview questions (3)	How to frame an interview answer.
Asking questions of the employer (3)	Come prepared with questions for the interviewer.
Sample interview questions (2)	Providing questions that might be asked.
Other (8)	Professionalism Interviewing etiquette To bring materials with you to the interview. What I should do prior to an interview. Don't be late Confidence of determination. Knowing that companies are looking not just for the skills to do the job, but also the soft skills too. The OhioMeansJobs website

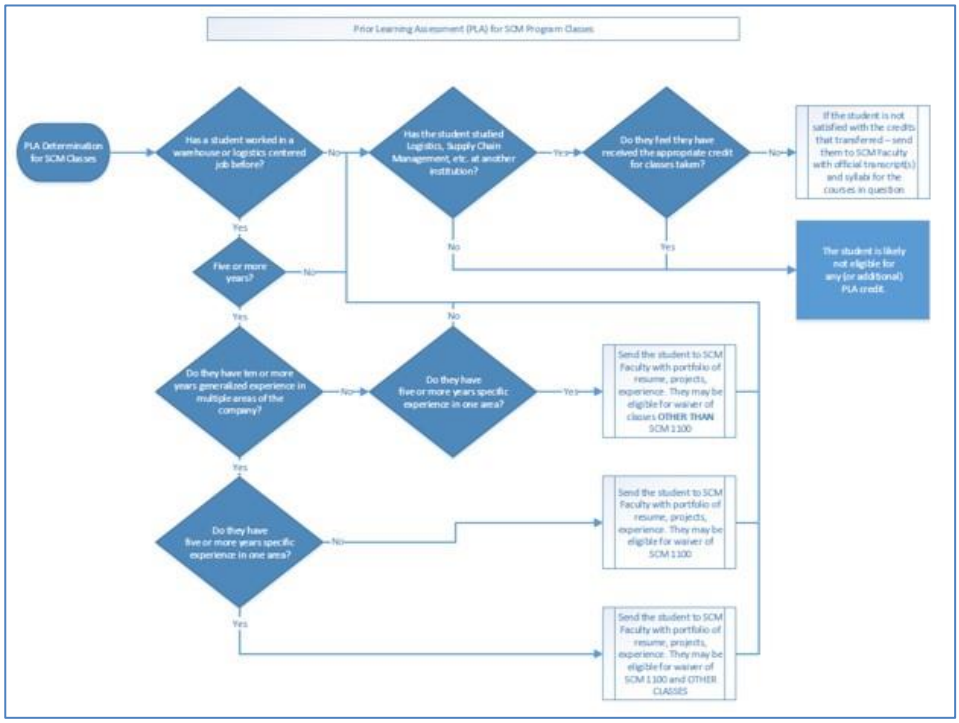
Responses to the question, "What are the 1 or 2 things you learned today that will be most helpful?" (N=48)

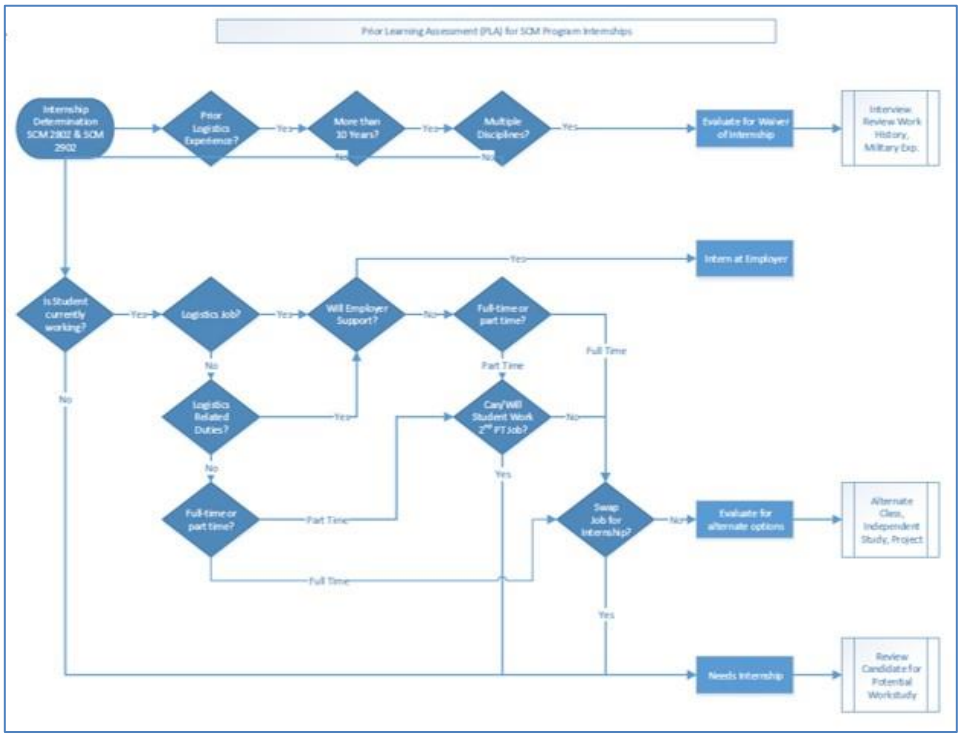
Students' recommended changes to the workshop

- Go into more detail about how to talk during an interview.
- Spend more time on interview etiquette.
- How to answer questions when you don't have an answer for them.
- Practice interviewing.
- Make it more geared towards engineering students.
- Make optional.
- More interactive.
- I just think it was very repetitive.
- Better room for having laptops and writing things spread out.
- Larger spaces on paper to write.

Responses to the question, "What 1 or 2 changes would make this workshop more helpful or effective?" (N=48)

Appendix F – PLA Decision Processes





Evaluation Plans

Program Evaluation

Report Writing

Data Collection & Analysis

Innovation *through* Revelation

The Rucks Group is a research and evaluation firm that gathers, analyzes, and interprets data to enable our clients to measure the impact of their work.

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