



PACIFIC Research & Evaluation, LLC

Final Evaluation Report

Trade Adjustment Assistance Community College and Career
Training (TAACCCT) Grant: Round 2

Rogue Community College

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Table of Contents

Executive Summary	1
Introduction.....	4
Research Plan.....	4
PATH Program Development.....	9
PATH Students	12
TAACCCT Grant Components.....	14
Pathways to Allied Health Professions Courses and Programs	14
Student Support Services	15
Industry Connections	20
TAACCCT Outcomes.....	24
Education Outcomes	24
Employment Outcomes.....	27
Program Impact.....	27
Academic Impact	28
Employment Impact.....	29
Evaluation Insights.....	31

Executive Summary

Pathways to Allied Health Professions (PATH) at Rogue Community College (RCC) was funded through a \$3 million, four-year Trade Adjustment Assistance Community College and Career Training (TAACCCT) grant from the US Department of Labor. In 2009, the American Recovery and Reinvestment Act amended the Trade Act of 1974 to authorize the Trade Adjustment Assistance Community College and Career Training (TAACCCT) Grant Program.

In December of 2012, Rogue Community College partnered with Pacific Research and Evaluation (PRE) to design and conduct the third party evaluation of the PATH program. PRE designed and executed a comprehensive plan for the implementation and impact evaluation components required by DOL, and collected additional data to inform continuous program improvements throughout the life of the grant. The evaluation plan as performed included an implementation evaluation to assess formative questions, and a historical cohort comparison impact evaluation to assess the impact of the PATH programs on participants in terms of key student outcomes.

A series of courses and programs were developed through PATH at RCC. These include courses that can be completed in less than one year and offered employer/industry recognized credentials, including the Basic Healthcare Certificate, the Community Health Worker training, the National Career Readiness Certificate (NCRC), Nursing Assistant 101 (NA101), and Certified Nursing Assistant 2 (CNA2) offerings. Students could complete the Clinical Lab Assistant (CLA) program in one year and the Medical Assistant (MA), Occupational Therapy Assistant (OTA), and Physical Therapy Assistant (PTA) programs in two years. PATH also modified a series of Developmental Education courses in Reading, Writing, and Math to an accelerated format. The PATH courses and programs were developed to meet a need in the local healthcare community, and industry partners were highly engaged in this process. Through these courses the PATH program touched 2,675 students and with the exception of the NA101, CNA2, and CLA offerings, all courses and programs are being sustained at RCC. Noteworthy student feedback about the new or modified programs or courses included comments about the valuable clinical experience they were gaining, reports of gaining employment through these clinical experiences, and having access to programs that otherwise would not have been available, particularly with regard to the OTA and PTA distance learning programs.

Aside from the instructional development and enhancements made as part of the PATH program, a significant component of the TAACCCT grants are the student support services provided to advise students academically and to provide career guidance. Overall, PRE's evaluation showed that the PATH program provided excellent career guidance to students whether in the form of The Job Council, work based learning opportunities, informal guidance provided by instructors, or the navigation coach. Although academic advising was not as prevalent as career guidance, students did feel that the PATH program was helping them to select the right courses for their career path. Recommendations are included for future considerations regarding the role of the navigation coach and how to ensure participants across programs are utilizing this program support.

Leveraging partnerships with local industry partners is something that RCC PATH excelled at over the course of the grant. RCC engaged industry partners early in the grant process and consulted with them in determining which courses or programs would be offered through the PATH program. By year two of the grant, RCC industry partners had been engaged in program design, curriculum development, and

recruiting, as well as in the training of instructors. Industry involvement in year four showed a slight decrease in certain program activities, particularly with regard to program management, leveraging of resources, and student recruitment. There was also a disparity between staff and industry ratings of commitment to program sustainability. From the staff perspective, this is something they would like to have seen more of from the industry partners as the grant came to an end.

PATH student academic outcomes showed success for the grant program with 440 out of 561 enrolled students completing a PATH program, for a completion rate of 78.4%. Further, 368 participants (66%) earned a credential and 35% went on to enroll in further educational programs. Although employment data were not available for all TAACCCT participants, self-report data showed that a sample of students were anticipating wage increases as a result of the course or program.

Finally, the results of the impact study showed very positive outcomes for the PATH participants. Although comparison group cohorts showed higher percentages of program completers and credential earned, the differences were less than ten percent in both instances and not statistically significant. With treatment group percentages at 75% for both of these outcomes, the majority of students enrolled in these new or modified programs are achieving these educational outcomes. The treatment group students showed excellent employment outcomes as well with 95% of incumbent workers earning a wage increase and 86% of those who entered employment, retaining employment for at least two quarters. On the whole, these results are promising relative to those of comparison group students, who had a higher entered employment rate by 11% but a lower retention rate by 57%. These results suggest that PATH programs are setting students up for long-term employment.

Although TAACCCT grant funding at RCC will conclude in September 2016, PRE would like to offer the following insights regarding the development of new or modified programs within Allied Health or other departments at RCC. These insights are based solely on the data collected through the evaluation activities referenced in this report.

1. The PATH navigation coach at RCC appeared to be underutilized by students in the PATH programs. When asked about this individual, some students reported utilizing the individual for academic and career advising and had positive reports of their experience. Other students who did not utilize the support seemed unclear about exactly who the navigation coach was and how they could be supported by that individual. Due to the fact that the PATH grant impacted 10 different courses or programs, it may have been difficult for the coach to become a known presence among the samples of students included in our data collection. Future efforts may consider focusing the support of the coach on specific programs to create more of a presence or employing multiple coaches to reach a greater number of students.
2. The PATH program showing the lowest percentages of students achieving education outcomes was the Clinical Lab Assistant program. Specifically, the completion rate and rate of credential earned was 56% for the two CLA cohorts included in the impact study which was 15-20% lower than the other treatment group cohorts. If Allied Health at RCC has plans to reinstate the CLA program in the future, we recommend reviewing these outcomes with stakeholders involved in the PATH grant to determine what could be done differently to produce higher rates of completion and credentials earned.

3. A final insight based on the evaluation is related to the number of programs and courses created as part of the PATH grant program. The relatively high number of programs developed may have been due in part to a desire to meet the projected outcome numbers for DOL. In the end, however, the grant program had no problem meeting the projected number of participants and may have had a greater impact focusing more resources on fewer programs.

Introduction

Pathways to Allied Health Professions (PATH) at Rogue Community College (RCC) was funded through a \$3 million, four-year Trade Adjustment Assistance Community College and Career Training (TAACCCT) grant from the US Department of Labor (DOL). In 2009, the American Recovery and Reinvestment Act amended the Trade Act of 1974 to authorize the Trade Adjustment Assistance Community College and Career Training (TAACCCT) Grant Program. On March 30, 2010, President Barack Obama signed the Health Care and Education Reconciliation Act, which included \$2 billion over four years to fund the TAACCCT program.

TAACCCT provides community colleges and other eligible institutions of higher education with funds to expand and improve their ability to deliver education and career training programs that can be completed in two years or less, are suited for workers who are eligible for training under the TAA for Workers program, and prepare program participants for employment in high-wage, high-skill occupations. Through these multi-year grants, DOL is helping to ensure that our nation's institutions of higher education are helping adults succeed in acquiring the skills, degrees, and credentials needed for high-wage, high-skill employment while also meeting the needs of employers for skilled workers. DOL is implementing the TAACCCT program in partnership with the Department of Education. The PATH grant was awarded in October 2012 and, with a no-cost extension and institutional support, supported services through June 2016.

PATH was designed as a capacity-building initiative to address local healthcare worker shortages prioritized by the largest healthcare employers in Jackson and Josephine counties. The project brought not only new allied health profession education and training, but also curricular and program innovations, strong industry engagement, and intensive use of data to better serve the region.

In December of 2012, RCC partnered with Pacific Research and Evaluation (PRE) to conduct the third party evaluation of the PATH program. PRE designed and executed a comprehensive plan for the implementation and impact evaluation components required by DOL and collected additional data to inform continuous program improvements throughout the life of the grant. The evaluation plan as performed is summarized below.

Research Plan

PRE's evaluation methodology included an implementation evaluation to assess formative questions and a historical cohort comparison impact evaluation to assess the impact of the PATH programs on participants in terms of key student outcomes.

Implementation Evaluation

The implementation evaluation included a two-step evaluation with a focus on the initial assessment of the program plan and curriculum as well as an ongoing assessment of how the program was implemented. The initial assessment was focused on collecting background data with regard to the development of the RCC TAACCCT program. Specifically, qualitative data were collected to learn more about how the program was created as well as how curriculum was developed and selected for use in the TAACCCT programs. In order to gather this information, a focus group was conducted with the RCC implementation team, and interviews were conducted with the partner organizations. Pre-existing data in the form of

project summaries and planning documents were reviewed to gather background data and assist in the development of the focus group and interview protocols.

The ongoing formative assessment focused on the operational strengths and weaknesses of the programs upon implementation. Formative data regarding staffing, delivery methods (assessment, recruitment, and career guidance), participation, and partner contributions were collected from RCC staff, partner organizations, and students through staff and student surveys as well as partner interviews during each year of the grant. The following table summarizes the methods used for addressing each of the formative evaluation questions.

Table 1. Evaluation Methods

Evaluation Question	Evaluation Method	Timeline
Analyze the steps taken by the institution to create and run the training program.	Project Team Focus Group Partner Phone Interviews	Year 1 Year 1
Assess the operational strengths and weaknesses of the project after implementation.	Project Team Focus Group Partner Phone Interviews	Year 1 Year 1
How was curriculum selected, used, or created?	Project Team Focus Group Partner Phone Interviews	Year 1 Year 1
How programs and program design were improved or expanded using grant funds?	Student Survey	All years
What delivery methods were offered?	Student Survey Stakeholder Survey	All years Year 2
What was the program administrative structure?	Stakeholder Survey	Year 2
What support services and other services were offered?	Student Survey	All years
Did grantees conduct an in-depth assessment of participant's abilities, skill, and interests to select participants into grant program?	Student Survey Stakeholder Survey	All years Year 2
What assessment tools and process were used?	Stakeholder Survey	Year 2
Who conducted the assessment?	Stakeholder Survey	Year 2
How the assessment results were used?	Stakeholder Survey	Year 2
Were assessment results useful in determining the appropriate program and course of sequence for participants?	Student Survey	Year 2
Was career guidance provided and if so, through what methods?	Student Survey	All years
What contributions did each of the partners make in terms of: <ul style="list-style-type: none"> • Program Design • Curriculum Development • Recruitment • Training • Placement • Program Management • Leveraging of Resources • Commitment to program sustainability 	Partner Interviews Stakeholder Survey Stakeholder Survey	Year 1 Year 2 Year 4
What factors contributed to partners' involvement or lack of involvement in the program?	Stakeholder Survey	Year 4

Which contributions from partners were most critical to the success of the grant program?	Stakeholder Survey	Year 4
Which contributions from partners had less of an impact?	Stakeholder Survey	Year 4

Data Collection Tools

Table 2 below summarizes the methods used for collecting data to address the formative evaluation questions and provide continuous program improvement data over the course of the grant. Each of these methods is described in more detail below.

Table 2. Summary of Data Collection Methods

Activity	Year 1 (2012-13)	Year 2 (2013-14)	Year 3 (2014-15)	Year 4 (2015-16)
Project Team Focus Group	✓			✓
Student Survey	✓	✓	✓	✓
Student Focus Groups		✓	✓	
Stakeholder Survey		✓		✓
Stakeholder Focus Group			✓	
Industry Partner Phone Interviews		✓		
Quarterly Report Surveys	✓	✓	✓	✓

Project Team Focus Groups

A project team focus group was conducted in years one and four of the grant. Eight staff members participated in the year one focus group including many of the team members involved in writing the grant. The following topics were covered: 1) Steps taken by the institution to create and run the training program, 2) Administrative structure of the program, 3) Selection of program curriculum, 4) Selection of students for the program, 5) Expectations of students in the program, 6) Strengths of the program, and 7) Constraints experienced. Eight staff members participated in the final project team focus group, although there was no overlap with those participating during the first year. This final focus group included the navigation coach, instructors, data analyst, and the dean and director of Allied Health at RCC who were hired over the course of the grant. Topics covered in this discussion included: 1) Implementation successes and barriers, 2) How PATH has met expectations for students, 3) How PATH has met employment demand in the region, 4) Contributions of industry partners, 5) Industry partner level of involvement, and 6) Plans for program sustainability.

Annual Student Survey

PRE conducted a student survey in the Fall of 2013 to gather feedback from Year 1 participants, Fall of 2014 to gather feedback from Year 2 participants, and Winter of 2016 to gather feedback from Year 3 and Year 4 participants. The purpose of this student survey was threefold: 1) to answer formative evaluation questions posed by DOL to all TAACCCT grantees, 2) to collect data regarding the summative outcomes of interest to DOL, and 3) to collect additional information of interest to RCC stakeholders in order to inform continuous program improvement. In the Fall of 2013, the survey was administered to all students in the PATH program, including the Developmental Education (DE) courses. Results showed that student feedback about healthcare related questions was skewed by those in DE courses. Because these students may have had no intention of enrolling in a healthcare program or course, nor any knowledge of

healthcare programs at RCC, DE students' responses are not included in the sample reported throughout this document, and they were not surveyed in subsequent years. The sample size for each year is presented in Table 3 below.

Table 3. Student Survey Sample Size

Year	Administration Date	n
Year 1 Survey	Fall, 2013	29 (67 before removing DE students)
Year 2 Survey	Fall, 2014	89
Year 3 & 4 Survey	Winter, 2016	81

Student Focus Groups

Student focus groups were conducted in years two and three of the grant. Eight PATH students from a mix of programs including Nursing Assistant 101 (NA101), Clinical Lab Assistant (CLA), Community Health Worker (CHW), Basic Healthcare Certificate (BHC), and National Career Readiness Certificate (NCRC) participated in the year two focus group. The following topics were explored during this group: 1) Course participation, 2) Ways of learning about the program, 3) Experience with advising services, 4) Healthcare career plans, 5) Opportunities received due to participation in the PATH project, 6) Barriers to program completion, 7) Suggestions for improvement, and 8) Additional comments. Student focus groups for the year three evaluation were composed of students from two cohorts of the Physical Therapy Assistant (PTA) program at RCC. The first group included five students in their first year of the PTA program at RCC and the second group included two students in their second year of the PTA program. The following topics were explored during this group: 1) Ways of learning about the program, 2) Experience with advising services, 3) Experience with Cooperative Work Experience placement, 4) Experience with 'cohort' model, 5) Healthcare career plans, 6) Opportunities received due to participation in the PATH program, 7) Barriers to program completion, and 8) Suggestions for improvement.

Stakeholder Survey

In order to capture stakeholder perceptions and feedback about the PATH project, this survey was administered to key stakeholders in the Spring of years two and four. The stakeholder survey evaluated program quality, contributions of industry partners, and perceptions of student feedback. Stakeholders included RCC staff and industry partners. The number of responses from staff and industry partner in years two and four are presented in Table 4.

Table 4. Stakeholder Survey Participants

	Stakeholder	n
Year 2	Staff	4
	Industry	9
Year 4	Staff	10
	Industry	10

Industry Partner Phone Interviews

Interviews were conducted over the phone during the Fall of 2013. Seven individuals participated in the interviews and represented Lane Community College (LCC), Linn-Benton Community College (LBCC), Providence Medford Medical Center, Rogue Valley Medical Center, Royale Gardens (n=2), and Three Rivers Community Hospital. Of the partners interviewed, three are involved in the CLA program, three

are involved in the PTA program, and two are involved in the Occupational Therapy Assistant (OTA) program. Partners were asked a series of questions related to their involvement in the creation of the training program in terms of program design, curriculum development, recruitment and training; the operational strengths and weaknesses of the program; and factors contributing to their involvement or lack of involvement.

Stakeholder Focus Group

A focus group with five members was conducted in Spring of 2015. Those participating were both RCC staff members and employer partners of the project. The project stakeholders held various roles at RCC and in healthcare fields including administrators of medical facilities and nursing homes, academic advisors, and instructors. The topics explored included: 1) Project strengths, 2) Preparation for students to work in healthcare, 3) Useful aspects of the Advisory Board, 4) Areas for improvement, and 5) Hopes for project sustainability.

Quarterly Report Surveys

PRE distributed a quarterly report survey during years two through four of the grant in order to gather information from various PATH team members for the DOL quarterly reports. The surveys asked staff to report progress made on relevant strategies during that quarter and provide any additional grant updates. PRE distributed this survey to 8-10 individuals quarterly, and compiled and synthesized the results into a summary document to assist the project coordinator with quarterly reporting requirements.

Impact Evaluation

Due to the fact that participants were enrolled in PATH programs based on eligibility, it was not feasible to conduct an impact evaluation that included true random assignment. Thus, PRE developed a historical comparison cohort method of evaluating TAACCCT program outcomes. This method allowed us to compare outcomes for participants in the grant-funded training with participants in historical cohorts that were comparable on key dimensions such as learning objectives, credential attainment, and certification outcomes. Table 5 below presents the treatment and comparison cohorts selected for the impact analysis as well as the number of students in each of the cohorts. These student cohorts will be compared on the following outcomes:

- Program Completion
- Retained in Program of Study
- Credential Earned
- Continued Enrollment
- Wage Increase
- Entered Employment
- Retained Employment

Table 5. Impact Analysis Cohorts

Treatment Cohort (Fall 2012-Spring 2015)	n	Historical Comparison Cohort (Fall 2008-Spring 2011)	n
Nursing Assistant 101 2013	26	Emergency Medical Technical Fall 2008	33

Treatment Cohort (Fall 2012-Spring 2015)	n	Historical Comparison Cohort (Fall 2008-Spring 2011)	n
Physical Therapy Assistant / Occupational Therapy Assistant Fall 2013	14	Nursing AAS Fall 2009	34
Clinical Lab Assistant Winter & Fall 2014	27	Dental Assistant Fall 2010	23
Medical Assistant 2015	30	Dental Assistant Fall 2010	23

I-Trac

The RCC project team used a data tracking system called I-Trac to keep records of participant demographics, services provided, and outcomes. I-Trac is a comprehensive, policy-based management information system for workforce development programs and is managed by Worksystems, Inc. PRE utilized I-Trac for reporting participant outcomes in this evaluation report and also as a tool for determining the treatment group for the impact study.

PATH Program Development

Three primary components of the PATH grant program at RCC will be reviewed below, including: 1) The development or modification of Allied Health courses, 2) The enhancement of student support services, and 3) The leveraging of relationships with local industry partners. The courses or programs that were created or modified through PATH include:

- Nursing Assistant 101 (NA101)
- Certified Nursing Assistant 2 (CNA2)
- Clinical Lab Assistant (CLA)
- Medical Assistant (MA)
- Occupational Therapy Assistant (OTA)
- Physical Therapy Assistant (PTA)
- Community Health Worker (CHW)
- Basic Healthcare Certificate (BHC)
- Accelerated Developmental Education (DE) Courses (Reading, Writing and Math)
- National Career Readiness Certificate (NCRC)

The support services that were enhanced through the PATH grant include the hiring of a navigation coach to provide advising and career guidance to students, as well as a partnership with the local Job Council. PATH engaged the Job Council along with local healthcare industry partners early in the grant process and fostered these relationships throughout the grant to create courses and programs that truly meet the needs of the local workforce and prepare students for immediate entry into healthcare careers.

Course and Program Development

The 10 courses or program offerings listed above were either added to the Allied Health course schedule or modified using the grant funding. The sections below detail the steps taken by RCC to create and run the PATH program; the administrative structure of the program; how curriculum was selected, used, or created; how programs were designed or improved using grant funds; and what delivery methods were offered.

Analyze the steps taken by the institution to create and run the training program

The steps taken by RCC to develop the PATH program started with the school's intention to apply for the first round of TAACCCT funding, which they ultimately decided against due to a lack of internal buy-in at the college and concern about a low number of Trade Act students. Despite the obstacles that prevented RCC from applying during the first round, the process of beginning that application guided the creation of the round two application for which there was greater institutional buy-in. Other previous grant programs aided in the formation of PATH including a previous Health Occupation Pathways to Employment grant also funded through DOL. The sections below provide additional detail on how the training program was run over the course of the grant.

Program administrative structure

In considering the administrative structure of the program, the RCC project team made it a priority to create a program structure that would be sustainable in the future. This included sustainability of leadership as well as the program components. The structure also included strategic partnerships with two other community colleges in the state of Oregon, Lane Community College and Linn Benton Community College, in the development of the OTA and PTA programs. These partnerships were created with program sustainability in mind. The team made an important decision to create a project coordinator position to oversee all administrative aspects of the grant. This position proved to work well for the grant as it provided consistency throughout the life of the project. In terms of sustainability, all but three programs will be sustained by the college moving forward. Those that will not be sustained include: NA101, CNA2, and CLA. The NA101 and CNA2 programs are both offered locally through another institution that will be able to meet the needs in the region, though it is still disappointing to end these programs after four years of hard work. The quote below from the director of Allied Health at RCC illustrates this disappointment about the courses that will not be sustained.

“When our CLA advisory committee met and we told them the program wasn’t going forward they were disappointed because of the high quality of students who were coming out of the program. There have been so many accomplishments. Every person on this team has done creative, phenomenal things. It was also a bittersweet decision around NA101. It came down from the institution that it was a financial decision.”

-PATH Project Team Member (Y4)

How was curriculum selected, used, or created?

The new and modified course curricula that were developed through the PATH program were highly driven by industry need. Partner institutions were involved in a variety of ways in order to help create and run the PATH program at RCC. Partners were involved in the early stages of the program, including initial discussions with RCC staff in order to determine specific program needs as well as the coordination of the grant application to DOL. As noted by a PATH team member, “Our industry partners show up, weigh in, and write our curriculum because we have shown that this is about them. It is about getting our students to them wholly prepared in terms of both technical skills and soft skills. They understand that we share that priority.”

Partners were involved early on with curriculum development for new courses and curriculum review for modified courses. Industry partners were specifically involved in curriculum development through selecting textbooks, reviewing the sequence of module instruction, and voicing their willingness to teach

courses as part of the PATH program. One industry partner commented about involvement in the development of the CLA program.

“My manager and I spoke to the RCC people about starting a CLA program. Within our hospital, we had been trying to facilitate a CLA program and were feeling like we weren’t having time to do an adequate job, but maybe the college could consider a CLA program. They started doing research and then decided to do the CLA as part of the grant. I am going to be an instructor for that program.”

-Industry Partner (Y2)

How programs and program design were improved or expanded using grant funds

Many of the PATH course curricula were already set prior to the grant funding but were modified or expanded using TAACCCT funds. Table 6 below lists each of the PATH courses or programs and whether they were modified or created using TAACCCT funds. Both the NA101 and CNA2 programs were significantly reworked as part of the PATH program to meet Oregon State Board of Nursing (OSBN) requirements. Other programs that were modified included the Basic Healthcare Certificate and the Community Health Worker training which was expanded to include more classroom time for students as well as some online components. Allied Health also began offering a set of accelerated general education courses (Reading, Writing, & Math). The modifications to the courses were made to help students progress through the program more quickly rather than risk attrition. Partnerships with Linn Benton and Lane Community Colleges allowed for the OTA and PTA distance learning program offerings at RCC, and The National Career Readiness Certificate training course was offered to PATH students to assist with career preparation. Finally, two programs newly created through PATH include the CLA and the MA program.

Table 6. Program Modification or Creation

Course/Program	Modified	Created
Nursing Assistant 101	✓	
CNA2 Acute Care	✓	
Basic Healthcare Certificate	✓	
Community Health Worker	✓	
Accelerated Developmental Education Courses (Reading, Writing and Math)	✓	
Occupational Therapy Assistant	✓	
Physical Therapy Assistant	✓	
Clinical Lab Assistant		✓
Medical Assistant		✓
National Career Readiness Certificate	Encouraged for PATH students	

What delivery methods were offered?

As mentioned above, the TAACCCT grant funding was used to modify delivery methods including adding online components for hybrid instruction and incorporating distance learning courses. Both the CLA and the MA programs were developed as hybrid courses to include online components. One project team member commented on the hybrid nature of the CLA program, “The CLA online curriculum included the addition of videos, discussion, and online modules from University of Washington.” Towards the end of the grant, portions of the MA program were being made available online and the CHW training also employed a hybrid model with a combination of in person and online instruction. The

PTA and OTA programs both adopted innovative delivery methods as they were offered through distance learning in partnership with Linn Benton and Lane Community Colleges. These were both successful PATH program offerings and created opportunities for students that otherwise would not have been available. One PTA student commented, “I’m very happy RCC is offering this. Outside of LCC, the only program is at Mt. Hood Community College, so for those of us who could not relocate, this is a dream come true.”

PATH Students

Characteristics

The following table summarizes the number of students involved in each PATH course or program over the life of the grant. This includes students enrolled in any course or program touched by TAACCCT grant funding, although participants in the DE courses and those completing the NCRC were not able to be counted as “participants” for the purpose of annual DOL reporting.

Table 7. Number of Students in PATH Programs

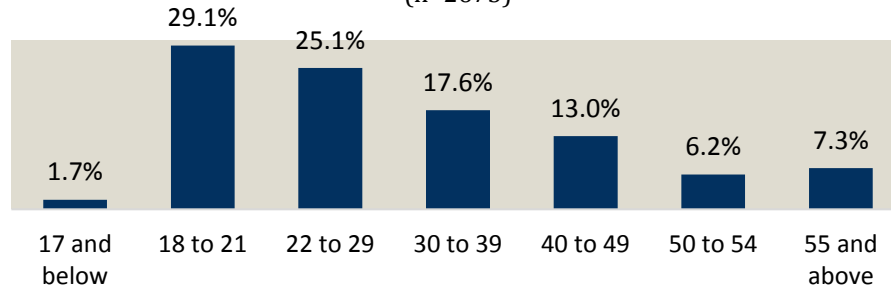
PATH Program/Course	Number of Students
BHC	53
CHW	177
CLA	37
CMA	85
CNA2 Acute Care	103
DE: MTH20ACC*	1306
DE: RD30ACC*	835
DE: WR30ACC*	544
NA 101	169
NCRC*	394
OTA	10
PTA	26

*Students in these courses/programs are not considered participants by DOL.

All PATH Student Characteristics

A total of 2,675 students were involved in programs or courses that were modified or created by the PATH grant including the DE courses and the NCRC. The majority of these students were female (66.6%) and age 29 or below (55.9%; see Figure 1). The average age of all those in courses or programs affected by PATH funding was 31.5 years. A small percentage (6.6%) of these students were Veterans or eligible spouses of Veterans.

Figure 1. Age Range of all PATH Students
(n=2675)



The majority of students touched by PATH funding were Caucasian (79.3%) and 6.0 % of students identified as Asian, American Indian or Alaskan Native, Black or African American, or Native Hawaiian/Pacific Islander. Three-percent (3.4%) identified as more than one race and 11.2% did not disclose race. A large percentage of PATH students did not disclose their ethnicity (41.1%). Of those who did, 16.1% identified as Hispanic or Latino.

PATH Participant Characteristics

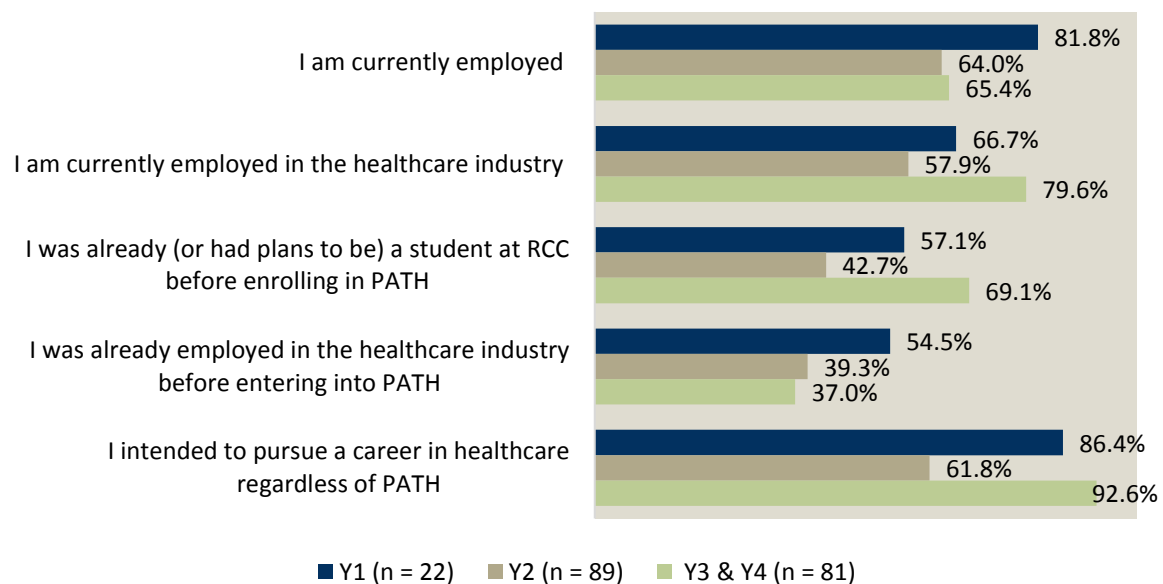
In terms of PATH participant characteristics, which includes those students enrolled in any of the health-related programs developed or modified by the PATH grant, there were a total of 561 participants over the four program years. Of the 561 participants, 475 (84.7%) were female, and the mean age of participants was 32 years at the time of enrollment. A total of 21 (3.7%) participants were Veterans or eligible spouses of Veterans.

The majority of students were Caucasian (85.2%) and six percent (5.8%) of students identified as Asian, American Indian or Alaskan Native, Black or African American, or Native Hawaiian/Pacific Islander. Three-percent (2.9%) identified as more than one race and 12.3% did not disclose race. Seventeen percent (16.8%) of participants reported their ethnicity as Hispanic or Latino.

Student Employment Characteristics

The annual student survey asked students a series of questions about their employment characteristics as shown in Figure 2 below. Many PATH students were currently employed during their time in the program and of those who were employed, more than half were working within the healthcare industry. Each year, the PATH program attracted a percentage of students from the region to attend RCC and for some students, impacted their career trajectory (see Figure 2).

Figure 2. Student Employment Characteristics by Year
(% Yes)



Eligibility Requirements and Recruitment

In the early stages of the program, staff indicated a plan to select students for PATH programs by determining which students have demonstrated an interest in health and also have some prerequisites in the area. Serving Veterans was also in the early plans for targeting students. Initial plans for recruitment included educating teachers about the program so they can provide relevant information to students in general education courses as well as the use of the navigation coach, a position created through the grant to provide additional student support services. Recruitment sources reported by students included counselors or advisors, the Job Council, speakers in a previous course, and self-recruitment. Students also reported hearing about specific courses or programs from classmates or friends.

TAACCCT Grant Components

Pathways to Allied Health Professions Courses and Programs

A series of courses and programs were developed through PATH at RCC. These include courses that can be completed in less than one year and offered employer/industry recognized credentials such as the BHC, the CHW training, the NCRC and NA101/CNA2 offerings. Students could complete the CLA program in one year and the MA, OTA, and PTA programs in two years. Each of these courses or programs is described in more detail below, including plans for sustaining programs moving forward.

Accelerated Developmental Education Courses

Three developmental education (DE) courses were enhanced through the PATH grant, including: Math 20ACC, Writing 30ACC, and Reading 30ACC. Each of these programs was modified to exist in an accelerated format. Math 20ACC is a pre-algebra course that is also designed to increase confidence in mathematics. Writing 30ACC is an accelerated version of the Writing 30 course that prepares students for writing at a college level. Reading 30ACC is a college level reading course that works to improve students' reading, study, and vocabulary skills. The accelerated DE courses were included in the first year of evaluation but later removed from evaluation activities when DOL indicated these students could not be counted as TAACCCT program participants. These courses will be sustained at RCC.

Nursing Assistant 101

The Nursing Assistant 101 (NA101) course at RCC was modified through PATH funding. This nine credit, one term course prepares students for Oregon State Board of Nursing (OSBN) certification as a Nursing Assistant. Changes and additions to the NA101 curriculum were based on OSBN requirements. The NA101 course will not be sustained at RCC.

CNA2 Acute Care

The RCC CNA2 course is approved by OSBN and provides 60 hours of classroom and skills lab instruction and 28 hours of clinical practicum (64 hours total). This training allows students to obtain employment in an acute care, rehabilitation and long-term care settings. Through PATH, CNA2 courses were modified for online delivery and updated based on new OSBN requirements. This course was discontinued in year three of the grant.

National Career Readiness Certificate

The National Career Readiness Certificate (NCRC) is a nationally administered work skills examination that measures skills necessary for on-the-job success, including applied mathematics, reading for

information, and locating information. PATH partnered with the Job Council to offer this certificate training to PATH students. All PATH programs encouraged students to take this examination, and students were provided with exam preparation as part of the CLA and MA programs.

Basic Healthcare Certificate

The Basic Healthcare Certificate (BHC) prepares students for entry-level work in the healthcare industry and provides a diverse range of specialty track electives which help guide students toward completion of an additional degree or certificate. The BHC is composed of highly adaptable classes with many online, night, and weekend course offerings to fit students' schedules. Through PATH, the BHC was modified to include elective course offerings to help students connect with other healthcare programs. The BHC will be sustained within Allied Health at RCC.

Community Health Worker

Through PATH, RCC expanded a 120-hour training, approved by the Oregon Health Authority, which allows participants to be certified as a Community Health Worker (CHW) in the state of Oregon. The CHW training will be sustained within Allied Health at RCC.

Clinical Lab Assistant

The Clinical Lab Assistant (CLA) program at RCC was developed with PATH funding and helps students become qualified to assist with routine laboratory testing. The program includes a total of 39 credits over three terms. The CLA program at RCC will not be sustained moving forward.

Medical Assistant

A Medical Assistant (MA) is a healthcare practitioner qualified by education, experience, and examination to assist doctors in the performance of patient care, examination, and documentation. RCC developed a 39 credit, three term MA program through PATH. This program will be sustained within Allied Health at RCC.

Occupational Therapy Assistant

The Occupational Therapy Assistant (OTA) program is a Distance Education program in collaboration with Linn-Benton Community College. Allied Health at RCC plans to continue collaborating with Linn-Benton to offer this distance educational opportunity.

Physical Therapy Assistant

RCC has developed a partnership with Lane Community College to provide a Physical Therapy Assistant (PTA) program for students in Jackson and Josephine counties. This program prepares students to function as competent entry-level PTA. This program is contracted for another two years through Allied Health at RCC.

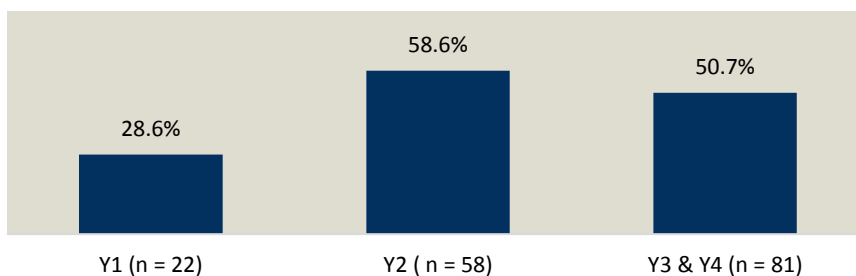
Student Support Services

Aside from the instructional development and enhancements made as part of the PATH program, student support services are a significant component of the TAACCCT grant, and provide both academic advising and career guidance as detailed below.

What support services and other services were offered?

The PATH grant developed the position of the navigation coach, whose role was to assist with recruitment of students into the PATH courses and programs and to help advise students on which courses or programs were a good fit for their healthcare career aspirations. As the grant entered into full implementation during year two, about half of the students who participated in our student survey were utilizing this additional support service provided through the grant (see Figure 3).

Figure 3. PATH Provided Advising Resources that Otherwise Would Not Have Been Available
(% Agree/Strongly Agree)



In year two, 50% of staff who completed the staff survey (n = 4) felt that PATH was providing advising resources that otherwise would not have been available to students, and by year four, 60% of those staff completing the survey (n = 10) indicated students were receiving unique advising through the PATH grant. Although some students appear to be using the navigation coach's services, the evaluation did not provide strong evidence that this position was particularly useful for providing advising services. For example, in the year two focus group one student commented on a positive experience with standard advising services, "She's in the nursing department. They do a really good job of trying to make sure you have what classes you need. They don't make you feel like you're doing it yourself."

Was career guidance provided and if so, through what methods?

In addition to offering academic advising services to PATH students, the navigation coach provided career guidance. Aside from the navigation coach, PATH students reported receiving career guidance from course instructors as well as through the work based learning opportunities provided to them in the form of clinical placements. PATH also partnered with the local Job Council to provide additional career guidance to students. Students described positive experiences working with the Job Council over the years as one student commented, "I absolutely love The Job Council. Through TJC, I have my foundational workshops completed, my gold NCRC, typing certificates, medical terminology certificates, caregiver training certificate, Oregon food handlers' card, healthcare provider CPR, and I now have clerical assistant work experience."

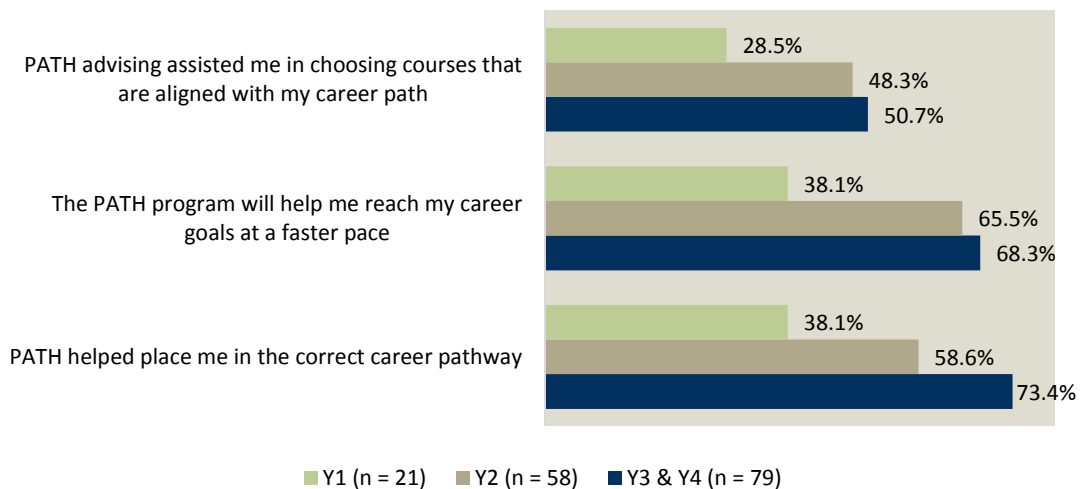
The figure below shows that the impact of the career guidance provided by the PATH program increased over the course of the grant. More than half the students in the annual survey credit PATH with helping

"Christine Morris is an awesome advisor. The help and counseling she has offered me in continuing my education is greatly appreciated. Laurel Pederson has had a huge impact on the level of education the whole class is receiving through all her hard work and dedication. Without those two people the program would not be the success it is becoming."

-PATH Student (Y3)

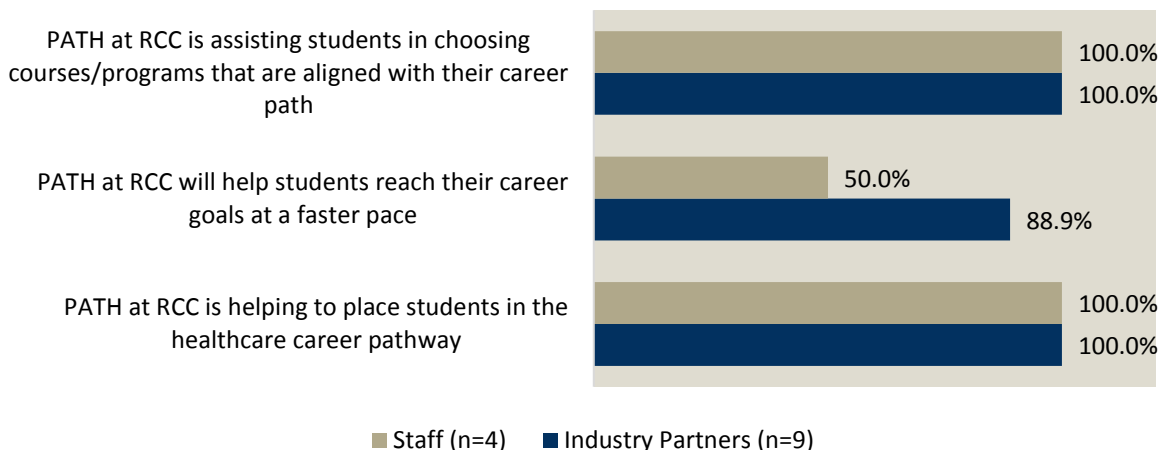
them reach their career goals at a faster pace, and by the final year(s) of implementation, 73% of students credit PATH with placing them in the correct career pathway (see Figure 4).

Figure 4. Student Perceptions of Career Guidance
(% Agree/Strongly Agree)



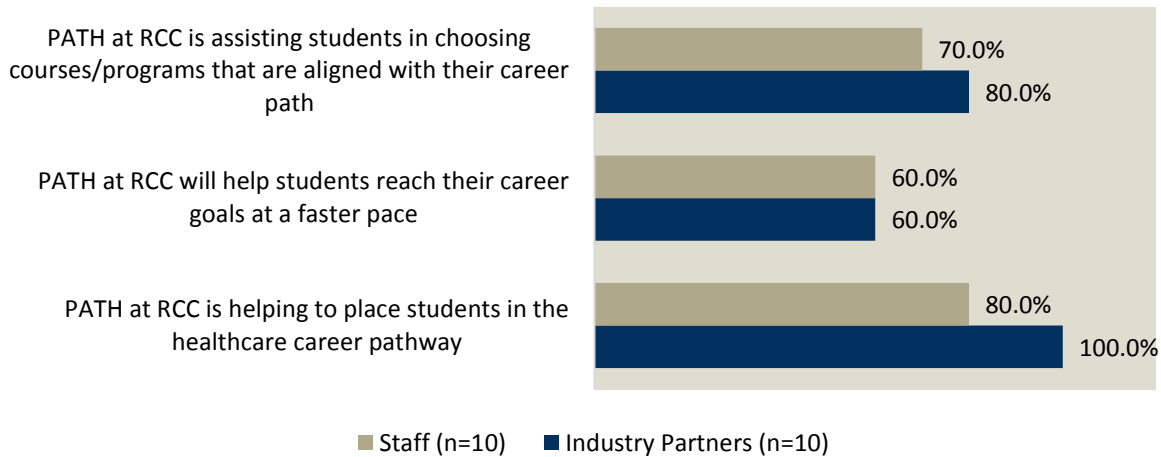
In addition to asking students to reflect on the career guidance provided by the PATH program, staff and industry partners were also asked to reflect on the career guidance that PATH is providing to students. All partners and staff in year two credited PATH at RCC with helping students to choose courses and programs aligned with their career path, and with placing them in a healthcare career pathway. There was less agreement from staff with regard to PATH helping students reach their career goals more quickly. (See Figure 5.)

Figure 5. Year 2 Industry Partner and Staff Perceptions of Career Guidance
(% Agree/Strongly Agree)



Industry and staff perceptions of career guidance decreased slightly in year four of the grant, particularly with regard to PATH helping students choose courses or programs that are aligned with their career path. In addition, only 60% of industry and RCC staff feel that PATH will help students reach career goals at a faster pace (see Figure 6).

Figure 6. Year 4 Industry Partner and Staff Perceptions of Career Guidance
(% Agree/Strongly Agree)



Work Based Learning Opportunities

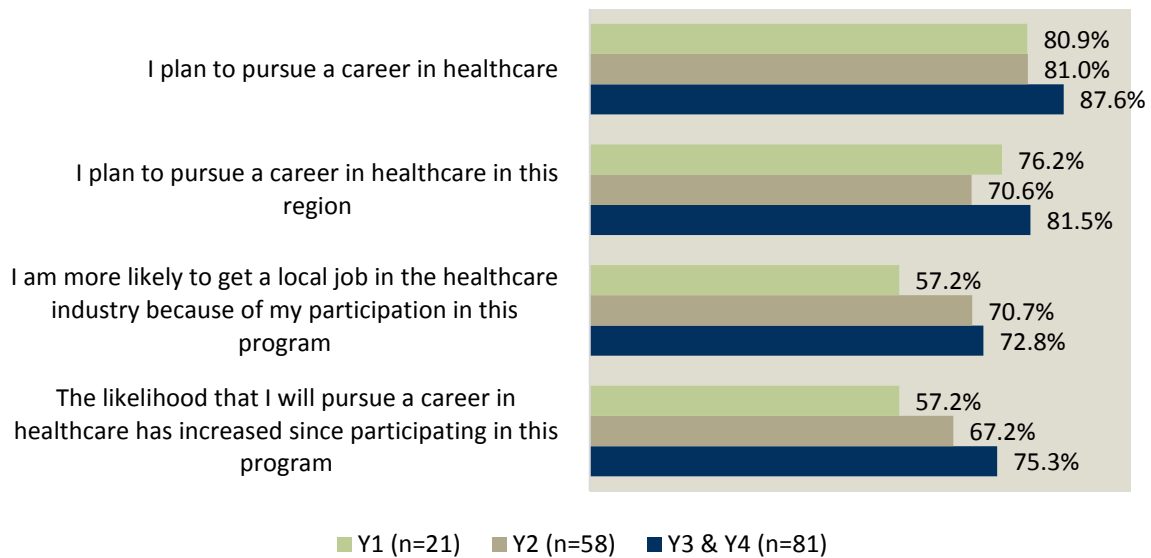
Students also received career guidance through work based learning opportunities provided by the PATH courses or programs. Work based learning opportunities are an extension of the classroom into a working environment that is similar to the students' future employment. Several programs funded through PATH included a work based learning opportunity as a requirement. For example, the CNA2 program required students to participate in a 24-hour clinical practicum at a healthcare facility in the area. Students over the years indicated that work based learning opportunities were critical to their success in their programs. Students discussed how their training allowed them to apply what they were learning in their courses and helped them to gain additional skills. One student in the MA program commented, "I am currently participating in an externship at Valley Immediate Care as a requirement of the program. I am having a great experience so far and the knowledge I am gaining is invaluable."

Figure 7 provides a snapshot of PATH student perceptions regarding their plans for healthcare careers. Over the course of the grant, the number of students who credited PATH with a greater likelihood of pursuing a healthcare career rose to 75% and the majority of PATH students (82%) reported plans to pursue their healthcare careers locally. These responses suggest that as a result of the new or modified course offerings, PATH is achieving the goal for students to pursue careers that fill a need in the local industry.

"If we would not have had our clinical experience we wouldn't be nearly as confident. This is our foundation. I have learned tremendously from our clinical experiences. It's been great for me. I didn't think I would seek employment in a skilled nursing facility, but having that experience going to clinical, I now have a position there doing skilled nursing because I loved it. Those pack a punch. They're great."

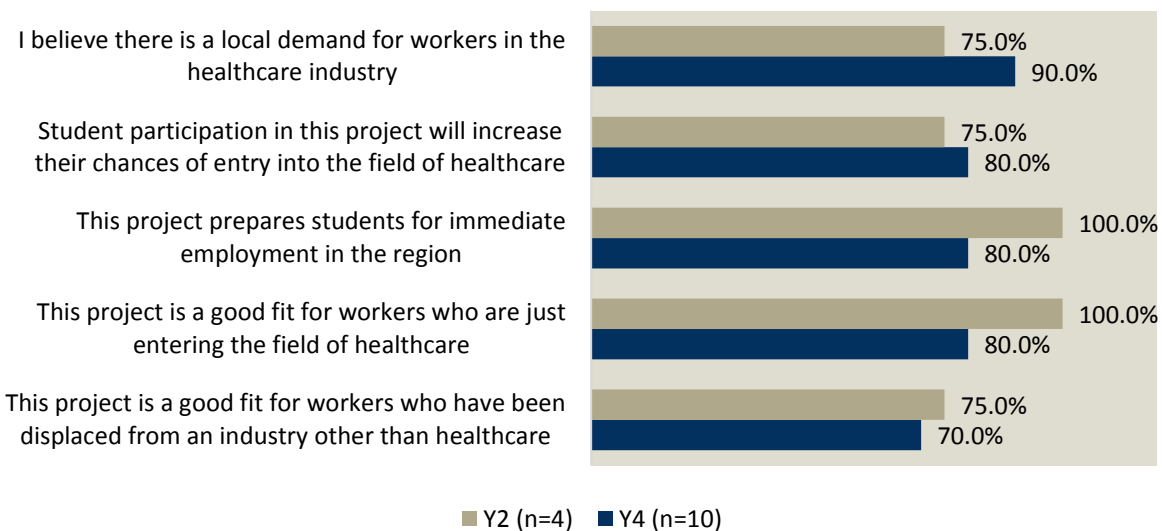
-PATH Student (Y3)

Figure 7. Student Perceptions of Career Preparation
(% Agree/Strongly Agree)



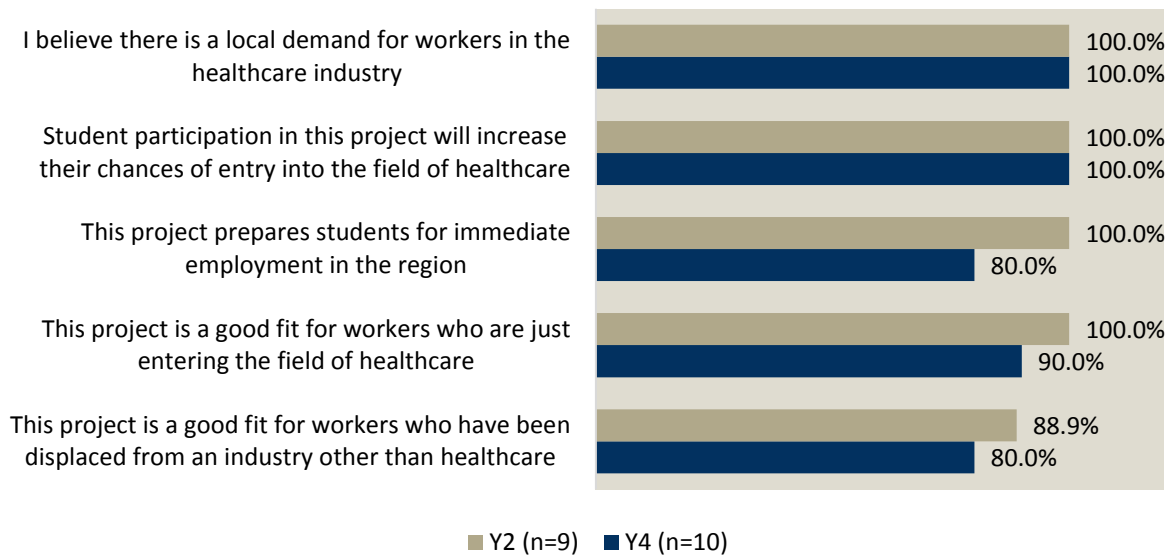
Staff and industry partners surveyed in years two and four of the grant responded to a series of questions about how the PATH grant is meeting local demand and preparing students for immediate employment in the region. As shown in Figure 8, the majority of staff surveyed in years two and four believe there is local demand for healthcare workers and that PATH is increasing students' chance of entry and immediate employment in the field of healthcare. As stated by one staff member on the year four survey, "The caliber of our instructors and course content provide high quality graduates to enter the profession in our area."

Figure 8. Staff Perceptions of Career Preparation
(% Strongly Agree/Agree)



Industry perceptions of PATH career preparation remained high over the course of the grant as shown in Figure 9. There was 100% agreement with regard to local demand for the PATH program and partners agree that PATH is increasing student chances of entry into healthcare and for immediate employment in the region. One partner in year four commented, “This program has provided local industry with well-trained CLA's.”

Figure 9. Industry Perceptions of Career Preparation
(% Strongly Agree/Agree)



Overall, PRE’s evaluation showed that the PATH program was providing excellent career guidance to students, whether in the form of The Job Council, work based learning opportunities, informal guidance provided by instructors, or the navigation coach. Although academic advising was not as prevalent as career guidance, students did feel that the PATH program was helping them to select the right courses for their career path.

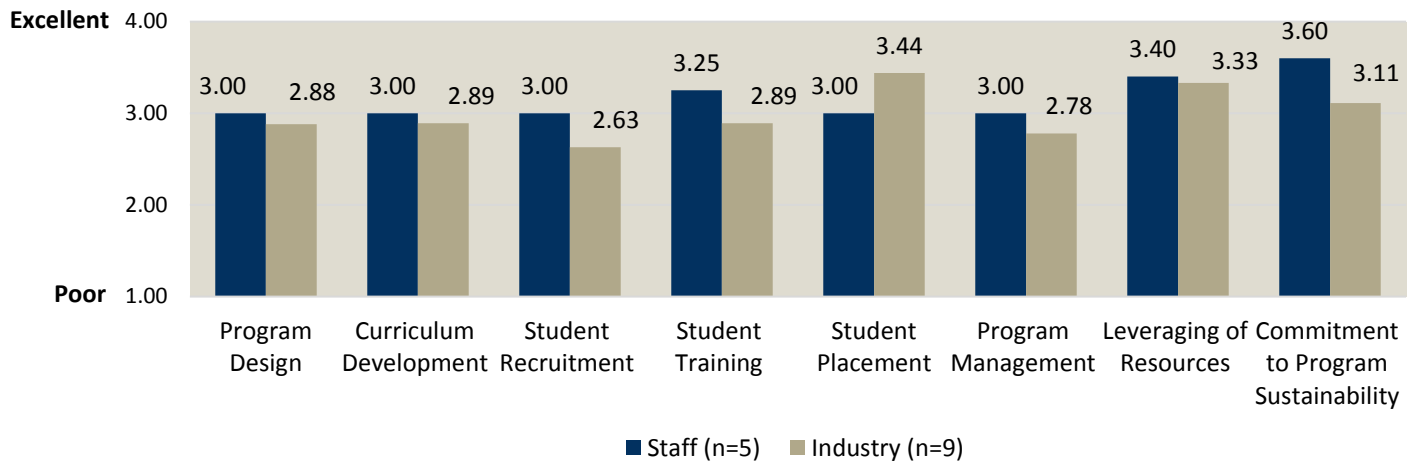
Industry Connections

Leveraging partnerships with local industry is an area in which RCC PATH excelled from the beginning of the grant, as evidenced by the many references to industry in previous sections of this evaluation report. RCC engaged industry partners early in the grant process and consulted with them in determining which courses or programs would be offered through the PATH program. By year two of the grant, RCC industry partners had been engaged in program design, curriculum development, and recruiting as well as in the training of instructors. Both staff and industry partners were asked to reflect on the contributions that the partners made to PATH in terms of:

- Program Design
- Curriculum Development
- Recruitment
- Training
- Placement
- Program Management
- Leveraging of Resources
- Commitment to program sustainability

Figure 10 below presents staff and industry partners' ratings in year two of the grant with regard to industry involvement in various program elements. With the exception of offering support for student placements, staff rated partner involvement slightly higher across all areas.

Figure 10. Year 2 Ratings of Industry Involvement

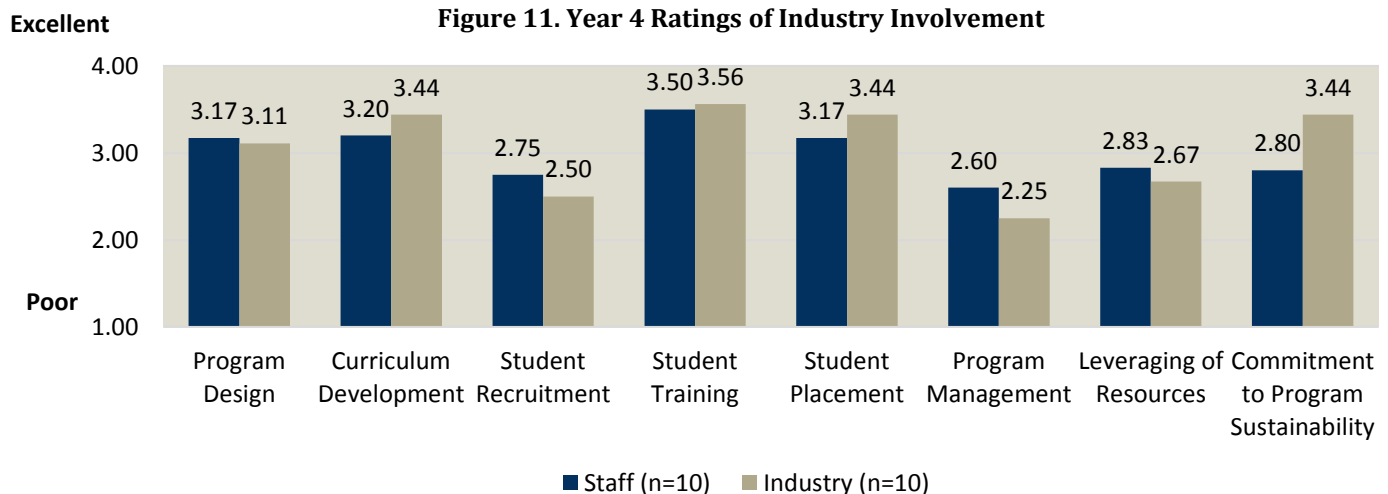


Ratings of industry involvement in year four showed a decreased level of involvement in about half of the program activities, particularly with regard to program management, leveraging of resources, and student recruitment. There is also a disparity between staff and industry ratings of commitment to program sustainability. From the staff perspective, this is something they would like to have seen more of from the industry partners as the grant came to an end. One project team member commented on this.

“It is unfortunate for one industry partner advisory board. They want the program to continue but they can’t commit the funds to make that happen. They are not the decision makers. The partners want us to create the programs they need and bear the cost for them which is not realistic because the programs cost a lot of money.”

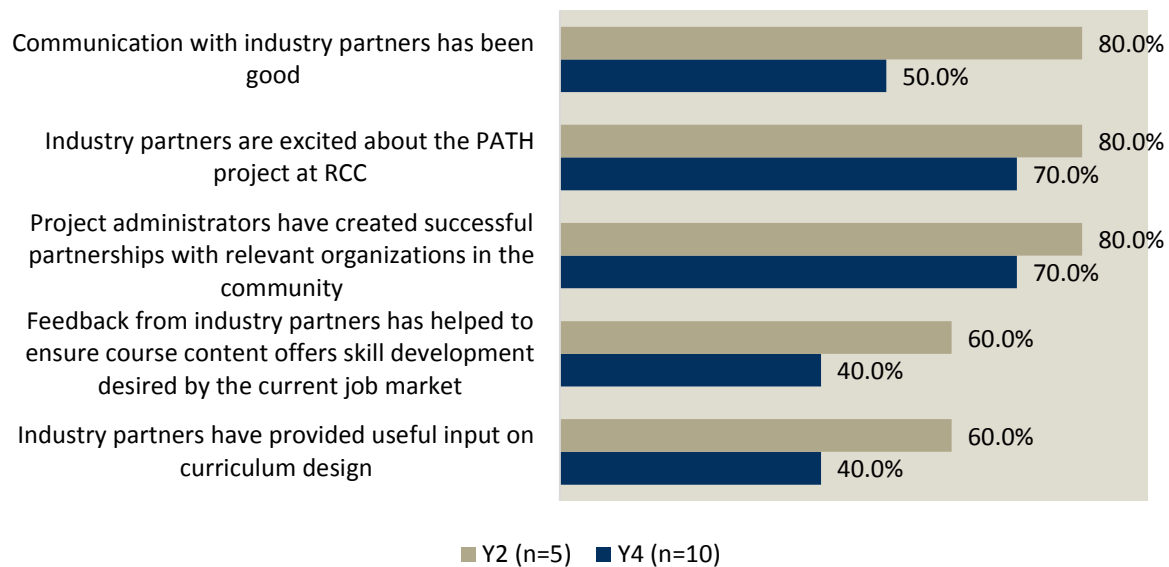
-PATH Project Team Member (Y4)

Figure 11. Year 4 Ratings of Industry Involvement



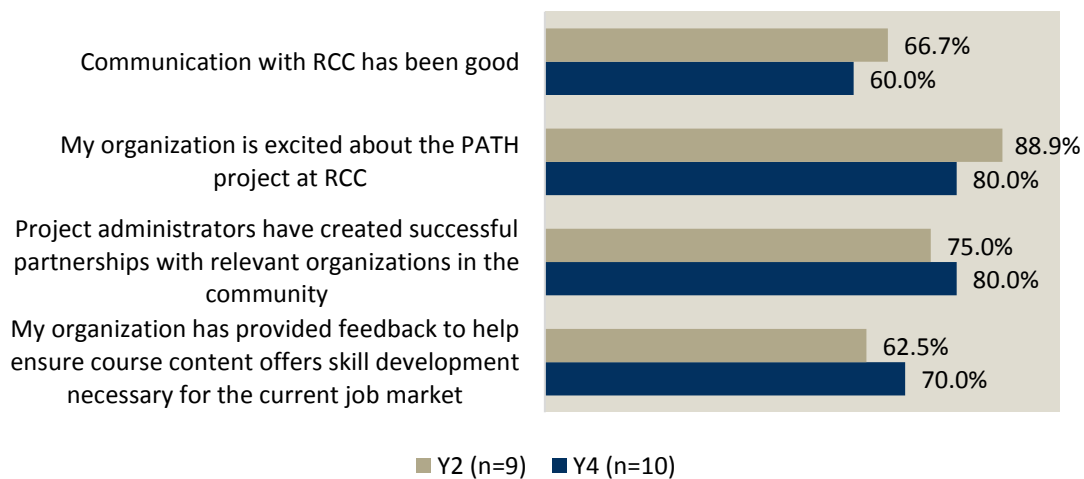
Staff feedback revealed a decline from year two to year four in perceptions of industry involvement in some aspects of the PATH grant, such as communication, feedback on course content, and input on curriculum design. Involvement in course development and curriculum design likely decreased due to the fact that these activities were not actively happening in year four of the project (see Figure 12). One staff member commented, “The department has done a wonderful job building relationships with the community partners and stakeholders. We have accomplished great work through this grant and are keeping most of the momentum moving forward.”

Figure 12. Staff Perceptions of Industry Involvement
(% Agree/Strongly Agree)



With regard to the relationships that PATH project administrators made with local industry, partners reported slight improvement over time as well as a slight decrease in perceptions of excitement about PATH and communication with RCC. This was counter to staff reports.

Figure 13. Industry Partner Perceptions of PATH Involvement
(% Agree/Strongly Agree)



What factors contributed to partners' involvement or lack of involvement in the program?

In the early stages of implementation, partners attributed their heavy involvement in the program to the ease of working with those implementing the program at RCC and the generally appealing nature of the school. Partner involvement was also heavily driven by the need for this type of program in the southern Oregon community, both for those receiving healthcare services and those in need of employment opportunities. Overall, the impact of industry involvement in PATH seemed to be greater in the early stages of the grant as they were contributing to program planning, curriculum design, placements, etc. As the grant came to a closing point and decisions were being made regarding program sustainability, involvement from partners decreased. This was reported by both staff and partners as shown in Figures 10 and 11 above. When asked about their level of involvement in year four of the grant, one partner said, "Communication should be improved. Also, meetings were difficult to attend when they are always scheduled at the same time since hospital employees work varying shifts."

Which contributions from partners were most critical to the success of the grant program?

Among the important contributions from industry partners, their investment in the grant during the planning and development stages was critical. These included suggestions for program development as well as contributions to curriculum design as they helped to ensure the graduates of the program would meet the needs of employers. This input was valued greatly by the college as stated in this quote from a PATH team member in year four of the grant, "Industry partners are the employers of our graduates. They are our customers ultimately. It is extremely important that we recognize their desires and expectations in the product (graduates) that we deliver. Their involvement and feedback is critical to the mission of Allied Health." When asked about contributions from industry partners that had less of an impact, the RCC project team responded that there was great value in, and appreciation for, all of the contributions made by industry partners and the only wish would be for more leveraged resources and additional support for program sustainability.

Program Strengths

In the early stages of implementation, program strengths included the accessibility of the program, the good relations with industry partners, the close connection between the program and employment opportunities, and the demonstrated interest in the program from students. Most importantly, the program addresses the need for skilled healthcare workers in the southern Oregon area, as described by a staff member, "It has opened career options that otherwise may not have been available to potential students. Healthcare is a growing need in our community and we are helping meet the needs of our citizens." An industry partner echoed this strength during a year one interview: "This program will increase healthcare opportunities for students in those areas, and increase the number of healthcare professionals in that area of the state." Noted as a program strength throughout this evaluation report is the close relationship between the PATH program at RCC and the local industry. One PATH team member commented in year four of the grant, "The fact that the program exists and is growing is its major strength. It is constantly building stronger relationships with local healthcare partners."

"The relationships that we have developed with our industry partners and the degree of trust I believe we have created with industry partners is what makes it work."

-PATH Project Team Member (Y4)

The program staff also developed strong relationships with the students who were part of the programs, and these students have been able to gain employment locally. One staff member commented on creating relationships with students through the grant.

“Creating relationships, not just with industry partners, but with the students is a strength of our program. I have students who still want me to do their advising even though I’m removed from that. One of the benefits in a community college is that we are based on the needs of the community and the people that want to remain in the community. So far nobody has had to move unless it was their choice to do so.”

-PATH Project Team Member (Y4)

Program Constraints

In the early stages of implementation, program constraints included the grant timeline, anticipated challenges with sustainability, and DOL related constraints. Staff turnover was also a constraint, especially toward the end of the program due to the non-sustaining grant funded nature of many of the job positions. One project team member noted, “It is tricky when you have people on grant funding whose jobs are not guaranteed after the end of the grant.” The other primary constraint mentioned by program staff is the inability to sustain the NA101 and CLA programs as mentioned previously. Finally, a barrier noted early in the grant and again at the end is the lack of planning time associated with TAACCCT grants. The project team suggested a six-month planning time and less time for wrap up at the end of the grant period. The team was grateful for the extension provided in year four as noted by one of the team members, “I am so grateful they extended the program dollars through this term. It would have been tricky. The programs would have gone away this year. The college is already picking up the tab for the remainder of the year so this has allowed us to serve more students.”

From the student perspective, program constraints include financial barriers and competition for limited enrollment programs. As stated by one student in year two of the grant, “There are only a small number of students accepted into the programs. That’s why I’m applying to four programs. My heart is set on RN or LPN, but I may have to do the paramedic program.”

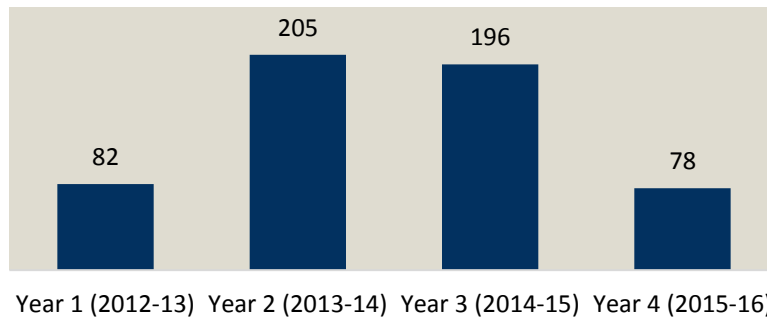
TAACCCT Outcomes

TAACCCT grants are geared towards the attainment of both academic and employment outcomes for participants. Education outcomes include program completion, continued enrollment, credential earned, credit attainment, and further enrollment in education. Employment outcomes include wage increases for incumbent workers as well as entered and retained employment for non-incumbent workers. The education and employment outcomes specific to the PATH participants are detailed in the sections below.

Education Outcomes

Education outcome data for PATH participants were recorded in I-Trac for all program participants (n=561). PRE also included a series of questions related to continuing education on the annual student survey. Figure 14 below breaks down the number of PATH students enrolled during each year of the grant. Enrollment was lowest in years one and four, when programs were just getting started or were ending. The numbers presented are for unique participants served.

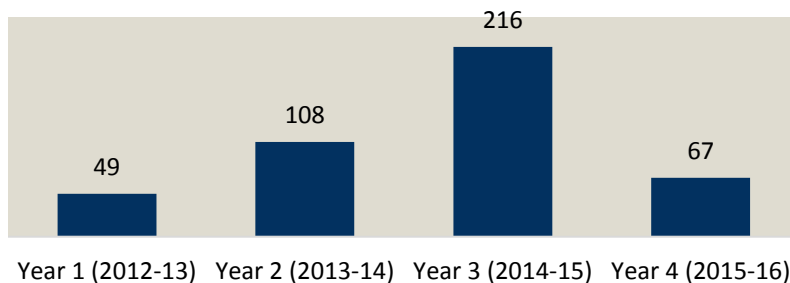
Figure 14. Number of PATH Participants by Year



Number of Completers

The number of PATH students completing their course or program of study was highest in years two and three as shown in Figure 15. By year three of the grant, all programs were up and running and the two-year programs were producing completers. Overall, a total of 440 of the 561 students completed a PATH program, for a total completion rate of 78.4%.

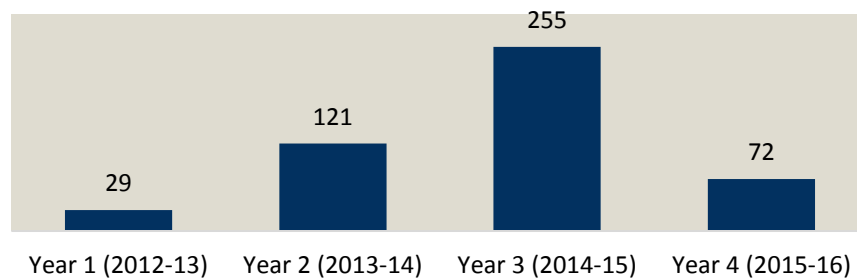
Figure 15. Number of PATH Completers by Year



Credentials Earned

Credential attainment includes both certificates earned from RCC and industry recognized credentials. Overall, 368 participants received a total of 477 credentials as part of a PATH program. Consistent with the number of completers, year three showed the highest number of credentials earned. Figure 16 breaks down credential attainment by program year.

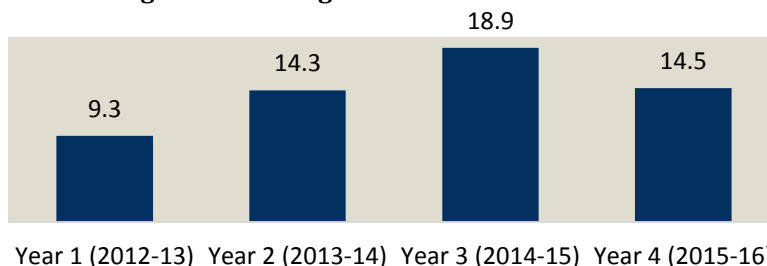
Figure 16. Number of Credentials Earned



Credit Attainment

For PATH credit bearing programs, the average number of credits earned by year is presented in Figure 17. On average, students earned 18.2 credits as part of a PATH program and this outcome is consistent with other educational outcomes in that year three showed the highest average number of credits earned.

Figure 17. Average Number of Credits Earned

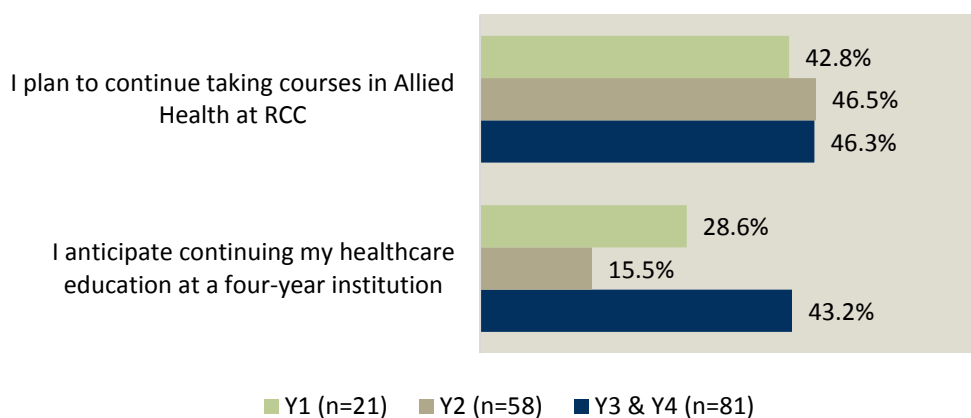


Enrollment in Further Education

PATH programs provided students with pathways to earn additional degrees. As one team member commented during the final project team focus group, “I got to deal with a couple of our MA students that are now in their fourth year at OSU applying to PA school. The MA program gave them a pathway and work experience. We are getting to see those pathways in action.” Students often took advantage of these pathways, and over the years, approximately half of the students surveyed indicated they planned to continue taking Allied Health courses at RCC, and a portion of students also planned to continue their education at a four-year institution (see Figure 18).

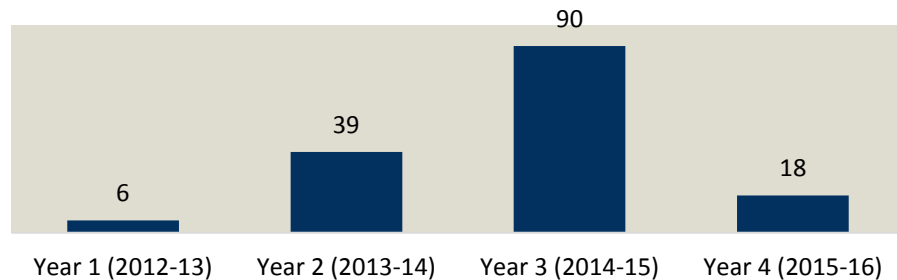
“As I was brand new to healthcare, this course gave me the initial skills and experience I needed to keep moving in a new direction. It is also a strong foundation for nursing school in the future.”
-PATH Student (Y4)

Figure 18. Continuing Education Plans
(% Agree/Strongly Agree)



Of the 440 students who completed their PATH course or program, 153 students enrolled in further education (34.8%). Figure 19 shows the number of students enrolling in further education by year.

Figure 19. Number of Completers Enrolling in Further Education



Employment Outcomes

Participation in PATH programs led to positive employment outcomes for many students, including a salary increase upon entering or completing the program, as reported by student survey respondents in Table 8. In addition, students reported receiving job offers or opportunities as a result of their involvement with PATH at RCC, as one PTA student remarked, “I have been offered a job through my first clinical experience, so that’s exciting.”

Table 8. Anticipated and Received Salary Increase

	Anticipate Salary Increase (Yes)	Already Received Salary Increase (Yes)
Year 1 (n=22)	27.3%	N/A
Year 2 (n=73)	37.0%	11.0%
Year 3 & 4 (n=96)	38.5%	16.7%

Program Impact

In order to examine the impact of the RCC PATH program on student education and employment outcomes, PRE utilized a quasi-experimental comparison cohort design with historical comparison groups. This method allowed us to compare outcomes for participants in the grant-funded training with participants in historical cohorts that were comparable on key dimensions such as learning objectives, credential attainment, and certification outcomes. PRE worked closely with the PATH project leads to determine the best comparison group for each of the treatment groups. Table 9 below presents the treatment and comparison cohorts selected for the impact analysis. For the impact study, a subset of participants was selected from the various PATH program cohorts including the Fall 2013 cohort of NA101 students, the Fall 2013 cohort of PTA and OTA students (combined for purposes of sample size), two 2014 cohorts of CLA students, and the 2015 MA cohort. PRE worked closely with institutional research at RCC to determine treatment cohorts based on program length, availability of outcome data, and cohort size. The student cohorts listed in Table 9 below will be compared on the outcomes of:

- Program Completion
- Retained in Program of Study
- Credential Earned

- Continued Enrollment
- Wage Increase
- Entered Employment
- Retained Employment

Table 9. Impact Analysis Cohorts

Treatment Cohort (Fall 2012-Spring 2015)	n	Historical Comparison Cohort (Fall 2008-Spring 2011)	n
Nursing Assistant 101 2013	26	Emergency Medical Technical Fall 2008	33
Physical Therapy Assistant / Occupational Therapy Assistant Fall 2013	14	Nursing AAS Fall 2009	34
Clinical Lab Assistant Winter & Fall 2014	27	Dental Assistant Fall 2010	23
Medical Assistant 2015	30	Dental Assistant Fall 2010	23

Academic Impact

In order to examine the impact of the PATH program on student academic outcomes, PRE compared completion rates, retention rates, credential earned, and continued enrollment for each treatment and historical comparison cohort, and for the treatment and comparison groups overall. The tables below present this information and an asterisk denotes a significant difference between cohorts.

Completion and Retention

Two treatment group cohorts (NA101 and MA) showed higher completion rates when compared to historical cohorts and two cohorts (PTA/OTA and CLA) showed lower completion rates. NA101 students had significantly higher completion rates than their EMT historical cohort. Overall completion rates for treatment and comparison students in the impact analysis showed a non-significant difference. For the outcome of retention, there were minimal students in the treatment or comparison cohorts retained. This is due to the fact that impact study cohorts were created from those early in the grant period so students had either completed or failed to complete by the time the data request was made in the Spring of 2016. For that reason, data are not presented by cohort on the outcome of retention.

Table 10. Program Completion

Treatment Cohort	n	%	Historical Comparison Cohort	n	%
NA101 2013	25/26	96.1% *	EMT Fall 2008	23/33	70.0%
PTA/OTA Fall 2013	10/14	71.4%	Nursing AAS Fall 2009	31/34	91.2%
CLA Winter & Fall 2014	15/27	55.5%	DA Fall 2010	17/23	73.9%
MA 2015	23/30	76.7%	DA Fall 2010	17/23	73.9%
Total Treatment	73/97	75.2%	Total Comparison	71/90	78.9%

Credential Earned

One treatment group cohort (NA101) showed higher rates of credentials earned when compared to historical cohorts and three treatment cohorts (PTA/OTA and CLA) showed lower rates of credential

earned. NA101 students had significantly higher completion rates than their EMT historical cohort. The overall difference in rate of credential earned for treatment and comparison cohorts was 6% and was not statistically significant.

Table 11. Credential Earned

Treatment Cohort	n	%	Historical Comparison Cohort	n	%
NA101 2013	25/26	96.2% *	EMT Fall 2008	23/33	69.7%
PTA/OTA Fall 2013	10/14	71.4%	Nursing AAS Fall 2009	30/34	88.2%
CLA Winter & Fall 2014	15/27	55.6%	DA Fall 2010	20/23	87.0% *
MA 2015	22/30	73.3%	DA Fall 2010	20/23	87.0%
Total Treatment	72/97	74.2%	Total Comparison	73/90	81.1%

Continued Enrollment

Two treatment group cohorts (NA101 and MA) showed significantly higher rates of continued enrollment when compared to historical cohorts and two cohorts (PTA/OTA and CLA) showed lower rates of continued enrollment. The overall difference in rate of continued education for treatment and comparison cohorts was 10% and was not statistically significant.

Table 12. Continued Education

Treatment Cohort	n	%	Historical Comparison Cohort	n	%
NA101 2013	19/26	73.1% *	EMT Fall 2008	3/33	9.1%
PTA/OTA Fall 2013	4/14	28.6%	Nursing AAS Fall 2009	22/34	64.7% *
CLA Winter & Fall 2014	6/27	22.2%	DA Fall 2010	2/23	8.7%
MA 2015	10/30	33.3% *	DA Fall 2010	2/23	8.7%
Total Treatment	39/97	40.2%	Total Comparison	27/90	30.0%

Employment Impact

In order to examine the impact of the PATH program on student employment outcomes, PRE compared the employment outcomes of wage increase, entered employment, and retained employment for each of the treatment and historical comparison cohorts and for the treatment and comparison groups overall. The tables below present this information.

Wage Increase

The employment outcome of wage increase was calculated only for incumbent workers, which was defined as those students who were employed during the quarter prior to program entry. Wage increase was determined by comparing a student's wage the quarter prior to enrollment to their wage during the quarter after completion. As shown in Table 13, three treatment group cohorts (NA101, PTA/OTA, and MA) showed higher rates of wage increases when compared to historical cohorts, and one cohort (CLA) showed lower rates of wage increase. The overall difference in rate of wage increase for treatment and comparison cohorts was 5% and was not statistically significant.

Table 13. Wage Increase

Treatment Cohort	n	%	Historical Comparison Cohort	n	%
NA101 2013	13/13	100%	EMT Fall 2008	21/24	87.5%
PTA/OTA Fall 2013	11/11	100%	Nursing AAS Fall 2009	21/23	91.3%
CLA Winter & Fall 2014	13/15	86.7%	DA Fall 2010	12/13	92.3%
MA 2015	21/22	95.5%	DA Fall 2010	12/13	92.3%
Total Treatment	58/61	95.1%	Total Comparison	54/60	90.0%

Entered and Retained Employment

The outcomes of entered and retained employment were calculated for non-incumbent students who completed their program of study. Table 14 below presents the number of non-incumbent completers in each cohort.

Table 14. Non-Incumbent Completers

Treatment Cohort	n	Historical Comparison Cohort	n
NA101 2013	13	EMT Fall 2008	16
PTA/OTA Fall 2013	2	Nursing AAS Fall 2009	12
CLA Winter & Fall 2014	7	DA Fall 2010	14
MA 2015	5	DA Fall 2010	14

Three treatment group cohorts (NA101, PTA/OTA and CLA) showed higher rates of entered employment when compared to historical cohorts and one cohort (MA) showed lower rates of entered employment. Three treatment group cohorts (NA101, CLA and MA) showed higher rates of retained employment when compared to historical cohorts. The rate of retained employment for one cohort (PTA/OTA) was 0% for both treatment and comparison cohorts. Overall, the rate of entered employment was lower for the treatment group, but the rate of retained employment was significantly higher for the treatment group.

Table 15. Entered and Retained Employment

Treatment	Entered		Retained		Comparison	Entered		Retained	
	n	%	n	%		n	%	n	%
NA101 2013	6/13	46.2%	6/6	100%	EMT Fall 2008	3/16	18.8%	0/3	0.0%
PTA/OTA Fall 2013	1/11	9.1%	0/1	0.0%	Nursing AAS Fall 2009	0/12	0.0%	0/0	0.0%
CLA Winter & Fall 2014	5/7	71.4%	5/5	100%	DA Fall 2010	9/14	64.3%	3/9	33.3%
MA 2015	2/5	40.0%	1/2	50.0%	DA Fall 2010	9/14	64.3%	3/9	33.3%
Total	14/36	38.9%	12/14	85.7% *	Total	21/42	50.0%	6/21	28.6%

The results of the impact study showed very positive outcomes for the PATH participants. Although comparison group cohorts showed higher percentages of program completers and credential earned, the differences were less than ten percent in both instances and not statistically significant. With treatment group percentages at 75% for both of these outcomes, the majority of students enrolled in these new or modified programs are achieving these educational outcomes. The treatment group students showed

excellent employment outcomes as well with 95% of incumbent workers earning a wage increase and 86% of those who entered employment, retaining employment for at least two quarters. On the whole, these results are promising relative to those of comparison group students, who had a higher entered employment rate by 11% but a lower retention rate by 57%. These results suggest that PATH programs are setting students up for long-term employment.

Evaluation Insights

Although TAACCCT grant funding at RCC will conclude in September 2016, PRE would like to offer the following insights regarding the development of new or modified programs within Allied Health or other departments at RCC. These insights are based solely on the data collected through the evaluation activities referenced in this report.

1. The PATH navigation coach at RCC appeared to be underutilized by students in the PATH programs. When asked about this individual, some students reported utilizing the individual for academic and career advising and had positive reports of their experience. Other students who did not utilize the support seemed unclear about exactly who the navigation coach was and how they could be supported by that individual. Due to the fact that the PATH grant impacted 10 different courses or programs, it may have been difficult for the coach to become a known presence among the samples of students included in our data collection. Future efforts may consider focusing the support of the coach on specific programs to create more of a presence or employing multiple coaches to reach a greater number of students.
2. The PATH program showing the lowest percentages of students achieving education outcomes was the Clinical Lab Assistant program. Specifically, the completion rate and rate of credential earned was 56% for the two CLA cohorts included in the impact study, which was 15-20% lower than the other treatment group cohorts. If Allied Health at RCC has plans to reinstate the CLA program in the future, we recommend reviewing these outcomes with stakeholders involved in the PATH grant to determine what could be done differently to produce higher rates of completion and credentials earned.
3. A final insight based on the evaluation is related to the number of programs and courses created as part of the PATH grant program. The relatively high number of programs developed may have been due in part to a desire to meet the projected outcome numbers for DOL. In the end, however, the grant program had no problem meeting the projected number of participants and may have had a greater impact focusing more resources on fewer programs.