

Red Rocks Community College

Case Study Report – Data as of May 2013

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INTRODUCTION

In 2011, Colorado received a \$17.3 million Trade Adjustment Assistance Community College and Career Training (TAACCCT) grant from the U.S. Department of Labor. The project funded by this grant—the Colorado Online Energy Training Consortium (COETC)—has two principal purposes: 1) enhance the state’s energy-related programming by transforming curricula into more accessible formats via technology and mobile learning labs, and 2) develop and implement a redesign of the state’s developmental education (DE) program. More specifically, the COETC project focuses on 1) increasing access to employment opportunities in the state’s energy sector by expanding and providing online and hybrid delivery of energy certificates and degrees, and 2) redesigning DE curricula to accelerate students’ passage of gatekeeper courses.

The COETC project involves the thirteen colleges in the Colorado Community College System (CCCS) and two local district colleges, Aims Community College (Aims CC) and Colorado Mountain College (CMC).

CCCS contracted with Rutgers School of Management and Labor Relations (“Rutgers”) to be the COETC third-party evaluator. In this role, the Rutgers team created and implemented a multi-faceted research assessment design that includes quantitative and qualitative data collection and analysis.

A major component of Rutgers' COETC evaluation is a cohort study that compares the educational outcomes for students enrolled in traditional courses to those for students enrolled in COETC-developed and funded courses. In particular, this research focuses on the COETC’s second goal as described above. The study’s objective is to assess the success of DE courses restructured under the guidelines of the Colorado State Task Force on Developmental Education Redesigns (State Task Force). Specifically, it will evaluate the impact of factors such as demographics, Accuplacer scores, course registrations, student grades, employment, status, and wages on rates of retention, program completion, and employment after graduation. The methodology consists of quantitative analyses of data from Fall 2011 through Spring 2014 along with qualitative analyses of student experiences.

Toward the end of the Spring 2013 semester, Rutgers distributed four reports covering the study data collected to date from individual colleges and the consortium as a whole: “Integrated Year End Report,” “Career Coach Caseloads Analysis,” “Redesigned Course Outcomes,” and “Master Course List.” This case study provides an interim report, based on data provided in these reports, on the progress to date of Red Rocks Community College (RRCC) under the COETC grant.

The sections that follow 1) outline the overall study methodology and data sources, 2) provide background information on RRCC and its student population, 3) summarize the goals of RRCC’s COETC program, 4) describe the redesigned DE courses (math, English/reading, and energy) and present data on enrollment and outcomes, 5) assess the success of the career

coaching program instituted by RRCC as part of its COETC grant, and 6) conclude with recommendations for RRCC with regard to its COETC-funded programs. This report uses data collected prior to May 2013. The RRCC project is ongoing, and information collected after this date will be reported in subsequent project reports.

METHODOLOGY/DATA SOURCES

Quantitative Analysis

During the first project year, Rutgers worked closely with CCCS to refine the quarterly reports required from each of the system's participating colleges. Rutgers has used data from these reports to track progress and to provide the foundation for other data collection. In collaboration with CCCS, the district colleges, and college career coaches, Rutgers' developed and revised an Electronic Student Case File (ESCF) to capture data relating to the COETC career coaches' work with grant-eligible students. (ESCFs record demographic and academic information and track the issues and goals coaches and students work on along with any referrals made.) In addition, Rutgers designed a pre-course survey to collect information on student expectations about course work and career goals. Beginning Fall 2012, the colleges have administered the survey to students in traditional and redesigned DE courses.

The Rutgers team has also been working closely with CCCS and the district colleges to access the Banner student system (and RRCC's data system) to track student progress and achievement and to collect and analyze data for the cohort study.

Qualitative Analysis

Rutgers' qualitative evaluation focuses on COETC process issues and the experiences of project team members and participating students, faculty, and staff at the 15 colleges in the COETC consortium.

As part of this analysis, team members reviewed relevant documents, text answers from quarterly reports, ESCFs, pre-course survey results, and materials and websites developed by the State Task Force, CCCS, and/or individual colleges. Rutgers team members have conducted phone and in-person interviews with project leads, faculty involved in the restructuring and/or teaching of DE and energy courses, instructional designers, data coordinators, senior college administrators, and, whenever possible, students. On-site interviews were conducted at RRCC on January 29 and 30, 2013. The team members have analyzed transcriptions of phone and in-person interviews to identify program achievements to date, best practices, and critical issues for follow-up. Some of the responses from these interviews are quoted in this report.

Rutgers team members have also participated in and "observed" conference calls with project leads and career coaches and joined in webinars. In addition, they have observed and participated in forums sponsored by CCCS, such as sessions on DE redesigns.

COLLEGE DESCRIPTION AND OVERVIEW OF STUDENT POPULATION

RRCC is a non-residential college with campuses in Lakewood and Arvada, Colorado, both suburbs of Denver. Serving roughly 15,000 students in the Denver area each year, RRCC offers 150 programs leading to professional certificates or two-year degrees. Students may take courses in the traditional classroom setting and/or online and can major in programs such as health careers, speech pathology, computer technology, fire science, law enforcement, and water quality management.

RRCC had approximately 15,000 students enrolled during the 2011-12 academic year. This population had a fairly even gender division (50.7 percent female). Seventy-eight percent of the students were part-time, almost exactly the state average, and 22 percent identified themselves as belonging to a minority.

In 2012, 53 percent of RRCC students who earned a degree or certificate received a one-year certificate (as opposed to a two-year certificate or associate's degree), the highest rate in the state.

RRCC'S COETC GOALS

RRCC is involved in DE and energy sector COETC grant work. In its initial proposal, the college focused on providing water quality management (WQM) students with the foundational skills and resources they need to attain a good job in the water and wastewater industry. RRCC specified multiple objectives within this overall goal. The first was to enhance their program to make sure students are adequately prepared for employment. In particular, RRCC concentrated on teaching basic skills as needed to WQM students through career-specific or contextualized DE courses. RRCC also proposed to employ an "educational coach" (later titled "career coach") to provide WQM and other energy-oriented students with career counseling, advising, and other guidance. Another of RRCC's goals was to make its curriculum more accessible to students throughout Colorado. To accomplish this, the college sought to put the entire WQM curriculum online and to develop a WQM mobile learning lab (MLL).

As a last step in its efforts to provide effective WQM education and prepare students for entry into the workforce, RRCC aimed to expand its relationship with industry partners and, in cooperation with these partners, develop a hands-on training network. Toward this end, RRCC utilized the WQM Advisory Committee, which includes representatives from 20 water utilities throughout the state. Among other things, the committee helps RRCC make sure its WQM program reflects current industry standards and expectations. RRCC completed and complies with an industry Need-to-Know assessment. This assessment was developed by the Associated Boards of Certification (ABC) – a national organization that provides testing for professional certifications in Drinking Water Treatment and Distribution, and Wastewater Collection and

Treatment.¹ This criteria involves 25 categories which ABC which are required for proficiency in the field and are tested for on the state exam. In this same vein, RRCC planned to have its career coach expand existing industry relationships as well, also with the goal of identifying partners willing to provide hands-on education to WQM students. As part of this effort, RRCC planned to secure off-campus sites for the MLL where water/wastewater professionals can train WQM students in person. These water employees would first complete a train-the-trainer workshop. RRCC would then contract with them to teach MLL courses on a class-by-class basis. In addition to the regular compensation these employees receive for providing MLL instruction, the Colorado Operator Certification Program Office would award Training Unit credits to MLL enrollees with limited access to continuing education programs.

RRCC'S REDESIGNED DE PROGRAM

Besides the WQM activities described above, RRCC is conducting a two-stage restructuring of its DE sequences in English, reading, and math through the COETC grant. The first phase involved redesigning classes in these subjects in preparation for meeting the State Task Force guidelines. In the process, RRCC tested redesign methods such as contextualization and acceleration as described below. Phase two involves RRCC's current work toward creating a DE pathway in accordance with the state guidelines. This report focuses solely on the phase-one activities.

English/Reading Redesign

RRCC redesigned three English and reading courses as part of its goal to accelerate the DE process for students. The approach and challenges for two of these courses are set out here.

English/Reading Redesign: Innovative Models and Practices

English 090/121 Synchronous Combination. RRCC developed an English 090/121 class for six credits, three of which (those from English 121) count toward graduation. Initially, this class was intended to test out mainstreaming students from developmental education into college-level courses. ENG 090/121 registration was to be limited to students who tested directly into ENG 090. Upon launch, however, students who tested into the 060 DE level were also permitted to register.

Despite this registration error, students who tested into ENG 060 and were enrolled in the combination course reportedly did well. We interviewed several students in the class and found they liked being able to complete their DE course *and* earn credit toward graduation. In particular, students mentioned that this option allows them to get their degree more quickly and enter the workforce sooner. One student who is a veteran noted that the class helped him receive a housing benefit by giving him full-time student status. Before the redesign, students

¹<http://www.rrcc.edu/wqm/pdf/WQMNTKCFactsheet.pdf>. Accessed December 18, 2013.

had to complete these classes sequentially and may not have been able to take a full-time course load in one semester. Now students can earn six credits in one semester instead of two.

Reading/English 090 Combination. In the phase-one redesign, RRCC integrated Reading 090 and English 090 into one course. Students reported benefitting from this combination because it allowed them to learn both skills simultaneously. They also appreciated having to buy only one textbook rather than two and having one course of homework to do instead of two. These factors made the integrated course seem less intense and more manageable than coping with the separated versions.

English/Reading Redesign Challenges

Lack of structure. On the downside of the English/Reading integration, one English instructor teaching the 090/121 combination noted that faculty have struggled with finding the best way to condense the material from two courses into one. For this reason, the course feels less structured to those teaching it than it does to students.

Math Redesign

During the 2011-12 academic year, 60.1 percent (46,913) of students enrolled in DE courses across Colorado were enrolled in a DE math course compared to 25.9 percent (20,243) of students enrolled in English and 13.1 percent (10,877) in Reading.² It has been a challenge for colleges to serve the high volume of students requiring one or more developmental math courses and to identify methods to encourage successful progress through the developmental pathway.

The State Task Force determined that liberal arts and algebra pathways require different levels of math preparation. Consequently, it separated developmental math into two pathways: one for students interested in pursuing degrees and careers requiring algebra proficiency and one for students interested in degrees or fields where algebra or calculus are not as involved. In the second phase of its COETC-grant DE redesign, RRCC will put these new pathways into place. What follows describes the innovations and challenges involved in its phase-one math redesign.

Math Redesign: Innovative Models and Practices

Math 090/Astronomy 100 Combination. In phase one, RRCC has concentrated on curriculum changes that provide students with the foundational skills they need to further their energy careers. For its math redesign, RRCC created a contextualized approach for its introductory algebra course by combining Math 090 with Astronomy 100. Students responded favorably to

² See CCCS (2010). Academic Year 2011-12 Remedial Enrollment and Course Completion Rates. <http://www.ccs.edu/Docs/Research/AY2012RemedialEnrollmentandCompletion.pdf>

the combination when the same instructor teaches both, which makes the instruction more seamless. Having two teachers co-teach the two courses did not work as well.

WQM Learning Community. In Fall 2012, RRCC designed a contextualized course combining Math 090 with WQM 100 courses. The concept for this class involved students being able to apply developmental math knowledge directly to the WQM materials and thus move more seamlessly into college algebra as they progressed in the WQM program. Two instructors would work together to integrate the concepts presented in each class. Individual (non-exam) assignments for the two courses would be graded separately, but exams would be given and graded jointly to help reinforce the combination of course concepts. Unfortunately, students did not enroll for this course and it was not offered. Still, the development process provided valuable knowledge for faculty who plan to work on future contextualized courses.

Math Redesign Challenges

Experimentation with contextualization. RRCC's faculty and administration are learning as they go with regard to contextualized DE courses. One school official acknowledged the potential benefits from teaching students foundational skills such as math in an applied setting. He also noted, however, a concern over the limited nature of the application. In other words, students taking the combined math/astronomy course may not receive the training they need to apply math in contexts other than astronomy.

Redesigned DE Course Outcomes

To help determine the ongoing effects and outcomes of courses redesigned under the COETC grant, RRCC's project leads reported to the Rutgers team on their redesigned courses and the modality used by developmental education. This information appears below.

RRCC offered five unique redesigned DE courses in 18 unique section offerings through Spring 2013. Approximately half of these courses were offered in Spring 2013. Table 1 displays the rollout by term along with the number and percentage of total students served by these courses each term.

Table 1. RRCC Students Enrolled in DE Redesigned Course by Term		
Term and Year	Percentage of Total Redesigned DE Population (All Subjects)	Number of Students (Redesigned DE Population)
Fall 2012	45.4	118
Spring 2013	54.6	142
Total	100.0	260

In terms of overall student retention, 183 students (70.4 percent) who registered for redesigned DE courses persisted in the course, while 63 (24.2 percent) dropped the course and 14 (5.4 percent) withdrew after the term started.

Table 2 presents the course offerings by subject. At RRCC, just over half (57percent) of students enrolled in redesigned DE courses were in English courses, followed by math (15 percent), reading (16.2 percent), and DE contextualized³ classes (12.3 percent).

Subject	Percentage of Total Redesigned DE Population (All Terms)	Number of Students (Redesigned DE Population)
English	56.5	147
Math	15.0	39
Reading	16.2	42
DE Contextualized	12.3	32
Total	100.0	260

Tables 3 shows RRCC's redesigned courses by title, the number of students enrolled in each course, and the percentage of the total redesigned DE population enrolled in each course.

Course Title	Percentage of Total Redesigned DE Population (All Terms)	Number of Students (Redesigned DE Population)
Astronomy I w/Lab: SC1	12.2%	32
Basic Composition	36.2%	94
College Preparatory Reading	16.2%	42
English Composition I : CO1	20.4%	63
Introductory Algebra	15.0%	39
Total	100	260

³ The only course offered by RRCC considered "DE contextualized" was the combined Math and Astronomy course.

Table 4 presents the mean grade for each individual course. In the months ahead, Rutgers will compare section means to departmental means and include the results in later reports.

Table 4. Mean Grades Achieved by RRCC Students in Each DE Redesigned Course	
Course Title	Course Mean Grade⁴ (All Terms and Redesigned Sections Combined)
Astronomy I w/Lab: SC1	2.5000
Basic Composition	2.7887
College Preparatory Reading	2.6774
English Composition I : CO1	2.3500
Introductory Algebra	2.5714

RRCC'S ENERGY PROGRAM

Water Quality Management Redesign

RRCC offers two WQM career pathways. The first comprises five 40 hour non-credit courses in Water/Wastewater Applied Vocational Education offered through the Rocky Mountain Education Center. These courses allow current workers to earn training units and prepare prospective workers for the state licensing exam. The second pathway, which we focus on here, is RRCC's Associate of Applied Science (AAS) in Water Quality Management Technology. The courses and students in the latter program are the ones affected by the COETC grant because the courses were updated for online delivery and these students were the ones intended to be served by the career coach.

As noted earlier, RRCC is using the COETC grant to convert WQM courses to online and hybrid versions. The objective is to increase distance learning opportunities. By the time the grant concludes, RRCC will have 28 courses in online and hybrid format. This will give students throughout the state and beyond access to the program in a flexible format. When the Rutgers team visited RRCC, nearly all WQM courses were in an online format. As of the writing of this report, the transition to online and hybrid format was complete. We will discuss the launch and use of these online and hybrid classes in future reports.

Putting the WQM curriculum into a technology-based format has required substantial changes for a hands-on profession in a tight-knit department. A significant portion of the traditional WQM curriculum is taught face to face. Shifting the curriculum to hybrid and online takes the learning experience out of this environment. In the traditional classroom, students with industry experience can share valuable insight with students who are unfamiliar with the job. The knowledgeable students are often enrolled in WQM courses for continuing education

⁴ To conduct this analysis, grades were converted to a 4.0 grade-point average (GPA) at the system schools. Although DE course grades are not calculated within the student GPA, the conversion was made for this comparative analysis. All grades earned by students in the redesigned course, regardless of term or section, were averaged for this calculation.

credits or to earn a degree. The expertise they often add to the lessons is appreciated by instructors and the other students.

A WQM instructor working to put curriculum online must find similar ways for students to engage with their peers. These might include scheduling online collaboration meetings or assigning papers to be written by peer groups. Whatever the approach, faculty want to make sure that the collaborative opportunities of the traditional classroom are available to students online. The WQM department is working hard to ensure the new program provides students with a high-quality learning experience and prepares them effectively for working in the industry.

Energy Curriculum Outcomes

RRCC offered five unique redesigned energy courses in 10 unique sections through Spring 2013. Approximately 90 percent of these courses offered in Spring 2013. Table 5 displays the rollout of these courses by term, along with the number of students and the percentage of the total redesigned energy population enrolled each term.

Table 5. RRCC Students Enrolled in Redesigned Energy Courses by Term		
Term and Year	Percentage of Total Redesigned Energy Population (All Terms)	Number of Students (Redesigned Energy Population)
Fall 2012	11.3	17
Spring 2013	88.7	134
Total	100.0	151

In terms of overall student retention, 138 students (91.4 percent) who registered for redesigned energy courses persisted in the course while eight (5.3 percent) dropped the course and five (3.3 percent) withdrew from the course after the term started. At RRCC, all students were enrolled in regular redesigned energy courses. None were enrolled in contextualized energy classes.

Table 6 displays the redesigned energy course offerings by course title.

Table 6. RRCC Students Enrolled in Redesigned Energy Courses by Course Title		
Course Title	Percentage of Total Redesigned Energy Population (All Terms)	Number of Students (Redesigned Energy Population)
Basic Water Quality Analyses	15.8	24
Introduction to Water Quality	32.5	49
Wastewater Collection Systems	10.6	16
Water Certification Review for C & D	28.5	43
Water Distribution	12.6	19
Total	100	151

Table 7 presents grouped mean grade outcomes for each individual course.

Table 7. Mean Grades Achieved by RRCC Students in Each Redesigned Energy Course	
Course Title	Course Mean Grade⁵ (All Terms and Redesigned Sections Combined)
Basic Water Quality Analyses	3.6667
Introduction to Water Quality	3.6136
Wastewater Collection Systems	3.4000
Water Certification Review for C & D	2.9512
Water Distribution	3.4706

Mobile Learning Lab

As we mentioned above, RRCC proposed to develop a MLL to expand WQM training opportunities beyond the immediate campus. The college set the mobile lab up like an in-classroom lab. It has all the equipment needed to teach the WQM courses. In its initial proposal, RRCC planned to use the lab at employer sites and have incumbent workers teach the courses to enhance the students' hands-on experience. While RRCC completed the MLL in April 2013, it is still working on a viable fiscal plan to sustain the lab and its use in the college's effort to expand the WQM program outreach.

In addition to its training provider partnerships described earlier, RRCC is developing partnerships with other CCCS colleges. The idea is for these schools to help RRCC in providing WQM training on other campuses throughout Colorado. The RRCC faculty and staff are working closely with college leadership to make sure everyone is on the same page should the

⁵ See footnote 2 above.

mobile lab begin traveling to other campuses. In particular, RRCC is working with Morgan Community College (MCC) in the northeast, Otero Junior College (OJC) in the southwest, and CMC in the northwest. It is also working with MCC on plans to bring the lab to Fort Morgan for a course during the summer.

As part of its MLL development program, RRCC faculty conducted all WQM experiments in the mobile lab during Spring 2013. To accommodate the space constraints, it reduced class size to 14 students. From all reports, though, students enjoyed working in MLL. Now that the lab is complete, RRCC will next determine how to use it most effectively for teaching and for marketing its WQM program.

CAREER COACH

RRCC's career coach has a strong background in workforce development, including working in programs associated with the Workforce Investment Act (WIA). In her previous jobs, she developed a strong knowledge of the workforce system and the obstacles faced by low-income workers and students. She also understands workforce center operations, data availability issues, and case management. This prior experience is enhancing her effectiveness as the career coach at RRCC.

As with nearly all schools in the grant, RRCC had to work to fit the career coach role as defined by the COETC grant into their existing institutional structure. While RRCC was still early in the process of setting up the COETC grant administration, it had a person filling a role similar to that of the new career coach. This person is a former WQM student who transferred to a four-year college and now works part-time in an advisory role to WQM students. When the new career coach came on staff, she worked with the part-time adviser to determine how best to merge the positions without losing services provided to students. As a result, the part-time person continues to handle much of the academic advising while the career coach has focused on providing students (mostly WQM to date) with the soft skills and access to community resources they need to succeed in finding employment. This approach works well for the WQM department. . The department believes that the best use of the career coach lies in supporting students in these non-academic ways.

It has been a challenge for students to understand the non-academic assistance available to them at the college. Accordingly, the career coach is diligently reaching out to students to better inform them of the resources available. She disseminates flyers to staff members who interact with students potentially eligible for career coach support under the grant. She also gives flyers and information to DE faculty.

In addition, the career coach distributes flyers to WQM instructors. These are mostly part-time faculty who also hold jobs in industry. For that reason, they are typically disengaged from the school community and have thus far been unresponsive to these outreach efforts. The career coach also visited WQM and DE classes at the beginning of the semester. Still, she continues to

have difficulty with faculty buy-in as there are “people who do [her] job in smaller capacities all over campus.” So far, it seems, most faculty do not fully understand the career coach concept.

While explaining the career coach service to faculty and staff has been challenging and has resulted in little buy-in to this point, students, predominately first-year WQM students, have bought in. These individuals have called, emailed, and stopped in to schedule appointments seeking career services such as help with resumes, mock interviews, help with internships, and financial assistance. As part of her interaction with students, the coach also asks questions regarding non-academic obstacles. So far, however, the WQM students, many of whom are male, have been reluctant to share personal information with her. That reluctance combined with the evolving definition of her role at RRCC has made it challenging to provide assistance beyond career-related areas.

To better serve students and increase their awareness of the career coaching services, the coach has been networking with departments throughout the school. In doing so, she meets with the advising department, administrative professionals, and the internship coordinator to become more familiar with the resources available to her students and to promote the value of her job within the college at large.

As noted earlier, the Career Coach has developed a relationship with the local workforce center and receives many referrals from it for the WQM program. So far she has met with about twenty students. Only one of these, however, is enrolled at RRCC. Still, the workforce center is an excellent source of referrals. One of the issues to work out, though, is that the timing and process of WIA funding does not necessarily line up with the academic year. This funding cycle has served as a barrier to enrolling WIA clients.

With regard to RRCC’s DE students, the career coach’s involvement starts with a career assessment that includes a conversation about career pathways and professions. Many DE students are unsure about what services the coach can provide but also unsure of what their path will be after college. Some have met with her to discuss internship opportunities, while others are struggling with homelessness and other external issues and understandably are focused on solving those challenges.

RRCC’s Electronic Student Case Files

As mentioned above, ESCFs help career coaches track student progress with goals. Rutgers hoped that RRCC’s ESCF data will help it better understand student challenges and best intervention practices, as well as the impact of coaching services on student retention and completion rates.

The career coach creates an ESCF for each student when they first meet and then inputs additional information from subsequent visits and interactions. Of the students registered by

RRCC’s career coach, 60 (71.4 percent) have an active electronic ESCF file and, as least as of May 23, 2013, 24 (28.6 percent) do not have an active electronic ESCF.⁶

RRCC’s Career Coaching Target Performance

At RRCC, the total number of students targeted under the grant for career coaching services is 206.⁷ Of these, the career coach has registered 84 (41 percent of the target) so far.

Career Coaching Eligibility Distribution

After reviewing active ESCF files and cross-referencing these with students enrolled in all redesigned courses, as certified by the project lead, Rutgers has identified the student eligibility for career coaching for 82.1 percent of all registered students. Table 8 shows the eligibilities of the students using the career coach along with the breakdown of how many students fall into each eligibility category. Of the total, 25 percent of students have been recorded as TAA-like. An additional 7.1 percent of students registered by the coach have enrolled in redesigned DE courses offered from Spring 2012 through Spring 2013 and 27.4 percent have enrolled in redesigned energy courses. Of those recorded as TAA-like, 22.6 percent have also enrolled in one or more redesigned courses: 2.4 percent in DE courses and 20.2 percent in energy courses.

Table 8. RRCC Summary of Student Eligibility for Career Coaching		
Eligibility Criteria	Percentage of Total Students in Caseload	Number of Students
TAA-Like	25	21
DE Redesigned	7.1	6
Energy Redesigned	27.4	23
TAA + DE	2.4	2
TAA + Energy	20.2	17
Unknown	17.9	15
Total	100	84

⁶ Rutgers defines an active ESCF file as a “response in progress” in which student information has been entered into the ESCF but not submitted to the record. Career coaches can return to and update information in active ESCFs. An ESCF that has been closed or submitted to the system by the career coach is considered inactive.

⁷ Students registered by the career coach may not have an active ESCF file. In order for the student to be considered registered, the career coach has to fill in basic information such as ID number and name but does not have to initiate an ESCF file. Alternatively, a student in this count may have been served by the career coach and the student’s ESCF submitted. Such ESCFs are considered inactive.

SUMMARY OF LESSONS LEARNED AND INNOVATIVE STRATEGIES

Water Quality Management Program

RRCC is on schedule and having great success with the online component of WQM. With the WQM classes available online, many new groups of students are expressing interest in the program, which speaks well to RRCC's goal of expanding its WQM outreach. The online access also makes the program readily available to current water or wastewater treatment operators, who can earn training units while being employed full-time. The presence of these experienced students benefits students who have not worked in the industry. In addition, students around Colorado and outside of the state can enroll in the program and take online courses. One service member, for example, took courses while stationed overseas. Rutgers will discuss this aspect of the grant in more depth in future reports.

Water Quality Management Outreach

RRCC's staff members are putting together informational packets about the WQM program and its online/mobile delivery. The packets will be disseminated to other career coaches in the state in effort to educate students about the opportunities available for long-distance WQM learning. The packet also includes a template press release that coaches can send to local newspapers to help spread the information as far as possible. This marketing process also involves working closely with the local workforce center to make sure RRCC can provide students with information on all possible funding sources. We also note here that MCC, OJC, and CMC are particularly excited about the WQM program expanding into their areas because of the availability of WQM jobs in the northeast and southeast where MCC and OJC are located and the employment possibilities related to the oil and gas industry that has a large presence in the northwest where CMC is located.

Mobile Learning Lab

RRCC now has a working mobile learning lab for its WQM program, one that has been tested by means of WQM faculty conducting all Spring 2013 experiments in it. This exercise has also helped instructors become more familiar with the MLL's lab components, which differ somewhat from those of traditional classrooms.

Internal Communications

When RRCC started working with the COETC grant, the project lead developed a document detailing role responsibilities and a timeline. This document continued to be useful as the grant activities moved forward in terms of designating responsibilities for deliverables. As this document is updated, it is made available to other team members through Dropbox to keep them up to date on their responsibilities. The document is also useful for tracking what has been accomplished to date.

SUMMARY OF CHALLENGES

Mobile Learning Lab Complications

While RRCC finished constructing the WQM MLL on time, there are still some logistical details regarding its use to explore. Taking the lab on the road requires a driver with a commercial driver's license. Financing for fuel and other expenses needs to be provided. Finally, routes that best fit the truck and trailer's capabilities need to be mapped out. In short, further research and planning regarding the feasibility and financial viability of taking the WQM lab on the road needs to be done.

RECOMMENDATIONS FOR RRCC

- RRCC should connect with other colleges that have experience with mobile learning labs or have instituted similar mobile programs. These schools may have useful knowledge regarding the cost benefits involved as well as good advice on the best strategies for travel and for program dissemination.
- RRCC should think about ways to expand interest in math programming for WQM students. Expanding the tutoring sessions offered by the college might be a good way to do this class.
- RRCC should better integrate the career coach role with its other student success services. Given its increased focus going forward on redesigned DE courses, the college should also focus on helping the career coach boost her involvement with and support of DE students.