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

The sections that follow 1) outline the overall study methodology and data sources, 2) provide background information on PPCC and its student population, 3) summarize the goals and primary elements of PPCC’s COETC program, 4) describe the redesigned DE courses (math and English/reading) and present data on enrollment and outcomes, 5) assess the success of the
career coaching program instituted by PPCC as part of its COETC program, and 6) conclude with recommendations for PPCC specifically and for the consortium colleges in general with regard to their COETC-funded programs.

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 and 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 CMC’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. They conducted on-site interviews at PPCC on January 31 and February 1, 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 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.
BRIEF OVERVIEW OF PPCC

Established in 1968, PPCC is a multi-campus, nonresidential college serving El Paso, Teller, and Elbert counties, which have an estimated population of 692,000.¹ Three of PPCC’s four campuses are in Colorado Springs: Centennial Campus in the southern part, Downtown Studio campus in the central part, and Rampart Range at the northern end. The fourth campus, Falcon, is northeast of Colorado Springs. Falcon was established to better serve clients and students in the Eastern plains.

Given PPCC’s close proximity to the Fort Carson Army Post and other military facilities, 20 percent of PPCC’s students are active duty military personnel, dependents of military personnel, or veterans.² PPCC serves the military population via the campuses named above and by offering courses at Fort Carson Army Post, Peterson Air Force Base, and Schriever Air Force Base.³

PPCC grants Associate of Arts and Science degrees that prepare students to transfer to four-year degree colleges. It also offers an array of career and technical education degree and certificate programs. In addition, PPCC administers a nationally recognized Allied Health program and “marquee” programs such as Outdoor Leadership and Recreation Technology and Water & Wastewater Technology. PPCC is widely known throughout southeastern Colorado for its Criminal Justice and Fire Science Technology training programs.⁴

In addition, PPCC has been active in providing development opportunities for its faculty. The administration has brought in speakers and held college forums to discuss strategies to engage adult learners and create at PPCC a culture of engagement and success across the institution. While the PPCC administration mandates that specific staff and faculty attend these forums, all PPCC staff and faculty are invited to attend. For example, in Fall 2012, PPCC invited Kay McClennen from University of Texas’s Center for Community College Student Engagement to campus. McClennen presented a forum titled “Students Speak. Are We Listening?” In Fall 2013, PPCC scheduled educational psychologists Dr. Raymond Wlodkowski and Margery Ginsberg to present on adult learning theories and how to implement accelerated courses while educating the whole student.

PPCC’s VP for Instruction noted that after these lectures and workshops, faculty members have informal discussions about the content. She believes these conversations are important as PPCC attempts to change its “thinking about adult learning and the culture of teaching DE.”

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¹ http://quickfacts.census.gov/qfd/states/08/08119.html
² http://www.cccs.edu/Docs/Communication/sb/College%20Fact%20Sheets.pdf
⁴ http://www.cccs.edu/Docs/Communication/sb/College%20Fact%20Sheets.pdf
For the 2011-2012 academic year, PPCC enrolled over 22,000 students. Of these 22,000 students, 80 percent were seeking degrees, 5 percent were pursuing certificates, and 7 percent were part of dual enrollment programs at regional high schools or home-school programs.

PPCC’s student population is 58 percent female. Approximately 27 percent of students identify themselves as belonging to a minority, while 61 percent report being White non-Hispanic. The average student body age is fairly evenly divided. Just under one-third is age 20 or younger, 36.7 percent is between 21 and 30 years of age, and the final third is age 30 or above.

PPCC offers a variety of learning options. Of these, approximately 21 percent of PPCC students take classes online, 77 percent attend class on campus, and nearly 2 percent attend classes at the available military sites.

PPCC’S COETC GOALS AND PRIMARY PROGRAM ELEMENTS

PPCC’s COETC project aims principally to address the educational needs of the service area’s Trade Adjustment Assistance (TAA) population by ensuring that students have with basic developmental education skills needed to compete in the job market and secure and maintain jobs with living wages. PPCC’s target population includes workers over the age of 35 whose skills are not relevant in the current job market. PPCC seeks to help TAA-eligible and “TAA-like” workers gain modern job skills. This includes helping them learn to use 21st century educational technology such as online courses and assisting as they close their educational gaps and learn skills appropriate for a changing job market.

The project goals also include increasing retention and completion rates, a significant challenge across the nation. For this purpose, PPCC proposed redesigned DE courses, including “modular” math courses paired with intensive advising. PPCC also proposed the instituting a career coach position. The career coach’s responsibilities would include coordinating recruitment the target population (at PPC primarily DE students), communicating with instructors about both services provided and possibly with students, and providing student support services such as career exploration and guidance. The case manager would also help students interested in enrolling in energy certificate and degree programs, and navigation of the community college and district college systems.

PPCC’S REDESIGNED DE PROGRAM

PPCC has been redesigning its DE curriculum for some time. In Phase I, which has occurred prior to and concurrent with the State Task Force, PPCC created several new models for delivering math, English, and reading course content. In Phase II, which began in Spring 2013, PPCC has been implementing the course sequence and models stipulated by the State Task Force, which includes integrating some of the innovative strategies developed in Phase I. This report focuses solely on Phase I.
A core group of PPCC’s math, English, and reading faculty collaborated on course redesigns. In rethinking DE programs, these teachers noted that students have different learning styles and different learning rates. To adjust for this, they chose modularization as a major redesign strategy. In addition, the faculty also adopted a contextualization approach to better engage students in learning the skill sets needed to progress in certificate and degree programs. What follows are some of the redesign innovations and models they developed and some of the challenges they encountered.

**ENGLISH/READING REDESIGN**

**English/Reading Redesign Innovative Models and Practices**

In its DE restructuring and redesign, PPCC’s ultimate aim is to prepare students for college-level coursework. In the early stages of the process, faculty members observed that some students pass courses without mastering the relevant skills and/or understanding the value and application of the course material. They also found that certain students in traditional “one-pace-fits-all” classes get bored and frustrated because the class moves too slowly for them or they become discouraged and get left behind because the class moves too quickly.

*Use of Modules:* To address the latter issue, PPCC established modular classrooms where students sit at their own computer station and work at their own pace. As they do, a faculty member and embedded tutor circulate to answer questions and provide any needed assistance and support.

PPCC’s online modules also allow DE students to move through curriculum at a pace that best suits them. They can move on as soon as they master a given section. They can also spend additional time on a section if they are struggling with the content or skills being taught. This arrangement allows many nontraditional students, especially those who test at higher Accuplacer levels and/or need only to refresh skills learned previously, to move more rapidly through required DE courses.

Under this setup, all students must pass a quiz (scoring 80 percent or higher) after each module before they can progress to a new module. The quiz also determines what the next module or “path” will be. The more frequent and more focused module quizzes that test student skills and knowledge after each unit allows even underprepared students to experience some success in moving forward. This model is far different from the traditional midterm/final exam model in which students pass or fail the whole course even if they know some of the content.

As PPCC told the Rutgers evaluator, the modularized classroom seems to serve the needs of DE students better than prior models. The module-based classroom helps instructors develop more individual relationships with students, which facilitates their assessing student strengths and weaknesses. It also helps them create assignments that build from strengths and better address student deficiencies. In short, having ongoing dialogues with students allows faculty to get to
know them better. In doing so, the teachers learn of the many outside challenges students face that can hinder their academic performance and affect retention. In addition, this close interaction helps faculty quickly identify and support students struggling with time management and study skills issues much more often than is possible in a traditional classroom.

Having modules available online enables faculty to waive traditional physical attendance as students can complete their work at home. This is a real advantage, given PPCC’s large number of students connected to the military – as soldiers, partners, and/or children – who may be deployed or relocated during the semester. Faculty members can create more individualized online learning plans for these students that take into account their changed situation.

**Contextualization:** PPCC’s DE English faculty has introduced contextualization into several courses. In these classes, all assignments weave substantive course material with content related to an identified theme. For example, in a class with many Career and Technical Education students, auto mechanic students worked on assignments related to auto mechanics. These included creating a business letter requesting a bank loan to start up an auto shop. The instructor observed that such contextualizing “lets the student embrace something that he or she is interested in and that becomes the motivator.” The teacher also noted that using a theme relevant to students sends them a message that they can accomplish something with their lives. He also has observed that as students master the material, their sense of self-confidence and competence has increased in ways he had not seen previously. This instructor is working to integrate other themes into his DE courses, including tailoring content and assignments for culinary arts students.

**English/Reading Redesign Challenges**

**Paradigm Shift at PPCC:** Among other things, online modules allow students to engage in skills-based work that helps them develop the fundamental knowledge they need for college-level classes. While the TAACCCT team members are excited about the pedagogical and content changes they are introducing, they have heard from other faculty who believe there are no longer enough liberal arts-based critical thinking courses in the curriculum. These teachers see module courses as being geared too much toward career success. They also note that module-based learning is a paradigm shift from traditional classroom learning, which means degree-seeking students must shift back to the more traditional learning modes as they advance in their studies.

**Secondary Education Preparation:** In recent years, PPCC faculty has seen an increase in students requiring some level of DE. Primary and secondary schools are not apparently preparing students sufficiently for college-level coursework. To address this issue, PPCC is developing relationships with local schools. The idea is for students to enroll in PPCC DE modular courses before high school graduation. This may better prepare them for college work and give them a firmer grasp of what they need to know to succeed in college.
MATH REDESIGN

During the 2011-12 academic year, 60.1 percent (46,913) of students enrolled in DE courses statewide were in a math course compared to 25.9 percent (20,243) in English and 13.1 percent (10,877) in reading. Given these numbers, colleges have been challenged to accommodate the high volume of students requiring one or more developmental math courses and faced difficulty in identifying methods to encourage successful progress through the developmental pathway. What follows are some of the redesign innovations and models developed to address these issues, along with some of the challenges encountered.

Math Redesign Innovative Models and Practices

Module-based Developmental Math: As with English and reading, PPCC has incorporated modularization in its developmental math curriculum. Specifically, it broke down Math 045, 090, and 099 math content into individual credit hours of information. Students test into a level and then complete each succeeding level at their own pace. As a result of this redesign, math faculty condensed three levels of course work, making them two credit hours shorter than the hours required if students took each course in the DE sequence.

Open Entry to Module-Based Courses: PPCC also created an “open entry” emporium classroom for the above modules. Students can enter the course at the first, fifth, and tenth week of the semester. All math DE students can complete their math requirements through this open entry. Since the 030 level was taken out of the sequence, students who place at that skill level are advised to take the module-based course or are referred to a community based ABE program in partnership with school district 11. This allows them to practice basic-level skills before testing into higher math levels.

Math Redesign Challenges

Finding Instructors with the Appropriate Qualifications: Shifting developmental math courses online has significantly changed the teaching and learning process. Many instructors familiar with teaching classroom algebra or other courses often struggle with managing the assignment flow and grading online. PPCC seeks to hire instructors with experience in online learning technology but encountered problems recruiting instructors with the appropriate subject matter expertise and technology skills needed to teach in the redesigned classrooms.

Concerns regarding Acceleration and Compression: Some math faculty have expressed concern about acceleration and compression in developmental math, as well as the State Task Force elimination of Math 030. They understand the context of the changes with regard to research on retention and completion rates using the traditional methodologies and sequencing. Still, they

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worry replacing 030 courses with “soft landing” options will lose the students community colleges have historically served.

**REDESIGNED DE COURSE ENROLLMENT AND OUTCOMES**

PPCC redesigned three DE courses and offered a total of 125 DE sections between Fall 2012 and Spring 2013. Approximately 54 percent of these sections were offered Spring 2013. Table 1 displays the rollout of these course offerings by term, as well as the percentage and number of students served by these courses out of the total of 518 students.

<table>
<thead>
<tr>
<th>Term and Year</th>
<th>Percentage of Total Redesigned DE Population (All Subjects)</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer 2012</td>
<td>7.2</td>
<td>37</td>
</tr>
<tr>
<td>Fall 2012</td>
<td>38.6</td>
<td>200</td>
</tr>
<tr>
<td>Spring 2013</td>
<td>54.2</td>
<td>281</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>518</td>
</tr>
</tbody>
</table>

In terms of student retention, 71.6 percent (371) of students who registered for redesigned DE courses persisted in the course, while 13.5 percent (70) dropped the course during the add/drop period, and 14.9 percent (77) withdrew from the course after the term started.

Table 2 presents the number of students enrolled in redesigned DE by subject. At PPCC, 72 percent of students served by redesigned DE course were in Math courses and 27.6 percent were in English.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Percentage of Total Redesigned DE Population (All Terms)</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>27.6</td>
<td>143</td>
</tr>
<tr>
<td>Math</td>
<td>72.4</td>
<td>375</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>518</td>
</tr>
</tbody>
</table>
Tables 3 shows the number of students at PPCC enrolled in DE redesigned courses by course title.

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Percentage of Total Redesigned DE Population (All Terms)</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Composition</td>
<td>18.3</td>
<td>95</td>
</tr>
<tr>
<td>Special Topics in English</td>
<td>9.3</td>
<td>48</td>
</tr>
<tr>
<td>Special Topics in Math</td>
<td>72.4</td>
<td>375</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>518</td>
</tr>
</tbody>
</table>

Table 4 presents the mean of grades for each individual DE redesigned course. In the months ahead, the Rutgers team will do further analysis of means, comparing section means to departmental means.

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Course Mean (All Terms and Redesigned Sections Combined)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Composition</td>
<td>2.4146</td>
</tr>
<tr>
<td>Special Topics in English</td>
<td>1.6429</td>
</tr>
<tr>
<td>Special Topics in Math</td>
<td>1.2181</td>
</tr>
</tbody>
</table>

**PPCC’S COETC CAREER COACH PROGRAM**

As noted in the Introduction, one goal of the COETC program is to expand access to employment opportunities in Colorado’s energy sector. To that end, the COETC consortium established the career coach position to facilitate student access and to assist students with any non-academic issues that inhibit their ability to complete a course of study successfully. Among other aid, career coaches provide career counseling and referrals, academic advising related to career choices, and counseling and referrals for a wide range of social and financial support services. To be eligible for COETC sponsored career coaching services, students must participate in a redesigned DE course or a TAACCCT-supported energy course or program, TAA-eligible or TAA-like, and/or have other U.S. Department of Labor program eligibility. PPCC hired a career coach in May 2012.

PPCC’s career coach resides in the Retention Services office, which also houses a coordinator of multicultural affairs and an interventions specialist. The staff members in this office work as a team. They help students solve problems in their outside lives and guide students toward achieving their academic goals. The career coach reports to the Assistant Director of Retention Services.
When hired, PPCC’s career coach spent time researching the grant and molding the career coach position to best serve the target population, which is students in redesigned DE courses.

Students often seek assistance from the career coach for non-academic challenges such as evictions, transportation, food, job seeking with a felony charge, and financial aid. The coach, who has extensive experience with the workforce system and student advisement, provides information about community resources and facilitates referrals as needed. She has also established ongoing relationships with some students, supporting them through a variety of academic and personal challenges and thereby enabling them to make progress with their studies and remain in college. Additionally, the career coach meets with students regarding employment and career goals, coordinating with using other services at PPCC such as a career office that provides career assessments.

**Career Coach Registration Targets**

PPCC has set the target number of students to be served by the career coach as at least 619 students over the grant’s course. As of Spring 2013, the coach had registered 331 students or 53 percent of the target. PPCC still has more than a year to go on the grant and career coach recruitment has been continuing steadily. Being at 53 percent at this point suggests that PPCC will meet or exceed its goal.

**Electronic Student Case File (ESCFs)**

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

Career coaches initiate an ESCF the first time they meet with a student and then add information as appropriate after subsequent visits and interactions. As of May 23, 2012, only 34.3 percent (115) of students registered by PPCC’s coach had an active ESCF. Registering the remaining students (216) is a goal for the coach to complete over the summer.

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6 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.

7 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.
**Career Coaching Eligibility Distribution**

As stated above, students are eligible for coaching services if they are enrolled in a restructured DE and/or energy program supported by the COETC grant, are eligible for TAACCCT assistance, or are unemployed or underemployed. The Table 5 shows the distribution of PPCC students seen by the coach as of Spring 2013.

Of these students, 13.6 percent of students were TAA-eligible or TAA-like and 0.3 percent were in DE redesigns and TAA-eligible. This suggests that there may be a very small number of TAA-eligible or TAA-like students enrolled in redesigned DE courses. In the months ahead, it will be important to identify if the unidentified TAA-eligible students are in fact eligible, and to compare these percentages with that of PPCC’s entire student population to be sure that the career coach is meeting as many TAA-eligible students as possible.

<table>
<thead>
<tr>
<th>Eligibility Criteria</th>
<th>Percentage of Total Students in Caseload</th>
<th>Number of Students (Caseload Population)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAA-Like</td>
<td>13.6</td>
<td>45</td>
</tr>
<tr>
<td>DE Redesigned</td>
<td>38.1</td>
<td>126</td>
</tr>
<tr>
<td>TAA + DE</td>
<td>0.3</td>
<td>1</td>
</tr>
<tr>
<td>Unknown</td>
<td>48</td>
<td>159</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>331</td>
</tr>
</tbody>
</table>

**SUMMARY OF LESSONS LEARNED AND INNOVATIVE STRATEGIES**

PPCC’s administrators, faculty, staff, and students have been actively engaged in redesigning the college’s DE program. They have worked as a team across traditional discipline boundaries and have collaborated in reimagining DE at PPCC. As the Vice President for Instruction told the Rutgers team, “I’m really excited to be a part of administering this grant and supporting faculty who are working so hard, up to the point where you have to kick them out or make them go home because they’re sick.” What follows are some of the lessons learned and challenges identified as PPCC redesigned its DE program.

**Lessons Learned**

*Self-paced developmental education works.* Students who met with the evaluator said they really like the self-paced modules and the easy access to a course instructor and an embedded tutor. They felt they received highly personalized assistance and support, much more than in
traditional classroom settings, which often involve lectures and little student interaction. Some students reported finishing a course in a couple months, while others took a full term.

*The Open Entry Environment Works.* Students also expressed satisfaction with the hybrid setup of redesigned courses. Students can complete work at home online but also have access to instructors and tutors who are knowledgeable about concepts and curriculum. When students have a problem, they come to the physical course classroom to seek help from instructors, tutors, and/or fellow students, email the instructor, and/or seek out additional tutoring services.

*Redesigned courses help students better understand materials.* In the PPCC model, a student’s pace and success depends on his or her full understanding of each part of the curriculum. Students reported they were unable to progress from one unit to another in the syllabus without showing mastery by means of unit tests and final exams. Taking the redesigned courses strengthened their understanding of concepts more successfully than listening to lectures and having their knowledge tested solely by mid-term and final exams.

*The DE redesign facilitates listening to and understanding student needs.* Administrators stated they have embraced a philosophy of students driving the DE program. One administrator said “students will let you know what they need,” whether it be contextualization or greater access to tutors and labs. By listening to students and integrating their input into action plans, PPCC believes it will see higher retention and completion rates.

*The DE redesign facilitates the identification of remedial and developmental learners.* PPCC finds the self-paced model with modularization helps them identify “students who need remediation” and “truly developmental students who need much more support.” Instructors feel they have been able to better track individual learning than in a traditional classroom, where often it is only at crisis points that they discover a student is in trouble.

**Challenges Identified**

*Finding instructors qualified to teach online.* As indicated above, as classrooms and teaching approaches change, PPCC is concerned about finding instructors who know course content and can use the new class technologies. Given the importance of technological literacy, PPCC has added this to job descriptions for new faculty. The administration, however, worries that it may not be able to find this mix of skills in the applicant pool.

*Reacclimating students to traditional classroom.* Students reported they preferred the self-paced classroom. When returning to traditional college-level classroom, they felt lost or bored. They missed the individual attention they had received in DE. Thus, an unintended consequence of the redesign has been acclimating students to a new mode of learning and then putting them back into the old one. Still, one DE faculty noted, as a result of their DE experience, students are better equipped to ask for what they need and take a more active role in their own learning and
success. And so, even when students change back to the old mode, he believes they will be more successful than they would be without their DE experience.

*Capturing grant activities.* Administrators have been concerned that the quarterly report does not adequately capture the valuable grant activities occurring at PPCC. They know that retention and completion rates can be measured. However, they wonder how the impact of curriculum changes can be measured or how the changes in faculty and student experiences and the culture shift at PPPCC can be captured?

**RECOMMENDATIONS FOR PPCC and the CONSORTIUM COLLEGES**

- Colleges should think about how they want to measure the success of their respective innovations and the implementation of the State Task Force DE redesign beyond retention and completion rates.

- The use of embedded tutors seems to be a successful strategy and might be considered by other colleges.

- Contextualization of curriculum also has met with much success in engaging students in learning basic skills. While the new studio and linked courses under the redesign afford the context for this to continue, colleges might also consider contextualization as they consider strategies for soft landings.

- Across the consortium, there needs to be more thought given to capturing the impact of the career coach on student retention and completion and to identifying the critical components in the coaching role that make a difference or even “the” difference.