ACADEMIC PROGRAM REVIEW
2021
Respiratory Therapy Program

SIGNATURE PAGE

This program review report for 2015-2021 is respectfully submitted by the members of the Grossmont College Respiratory Therapy Department. The undersigned full-time faculty members concur with the report as submitted in the Spring of 2021.

_____
Peggy Wells, Program Director

_____
Rebecca Handley, Director of Clinical Education

_____
Carey Flores

List of Full-time
Peggy Wells, Rebecca Handley, Carey Flores

List of Adjunct Faculty
Jaqueline Aristide, Joel Catungal, Pamela DeYoung, Francia Geluz, Annette Guerrero, Eileen Hebron, Kimberly Hyde-Drover, Victor Jackson, Cheol Lee, Chris McCauley, Anna May Mijares, Melissa Norberg, Tyler Russel, Matthew Savage, Roma Sitta, Farrah Startz, Jodee Valentine

Philosophy and Goals of the Respiratory Therapy Program

- The student will demonstrate the ability to comprehend, apply and evaluate clinical information relevant to the role of a Respiratory Therapist.
- The student will demonstrate the technical proficiency in all the skills necessary to fulfill the role as a Respiratory Therapist.
- The student will demonstrate personal behaviors consistent with professional and employer expectations as a Respiratory Therapist

Contents

SECTION 1 – OVERVIEW, DEPARTMENT HISTORY & PREVIOUS PROGRAM REVIEW RECOMMENDATIONS

1.1 Program Overview and Department History

PURPOSE OF SECTION 1.1: To help the committee understand the history of the department, what your department does, what population you serve, and your overall place in the college. Include any information that helps the reader understand your department, such as which courses are primarily GE, programs added, new degrees, certifications, where your students come from, where they go, and a description of your faculty (the role of FT, PT and staff). Student population specifics (transfer, basic skills, CTE, etc.) are useful as well.

Overview

The Respiratory Therapy Program is a two-year program that offers 14 courses including clinical practice at local hospitals. Pre-requisite classes are required prior to entering the program. A new cohort of students begins each fall semester. Grossmont College awards an Associate in Science in Respiratory Therapy (ASRT) which is necessary for eligibility to take the registry examinations administered by the National Board for Respiratory Care (NBRC). An Associate Degree in Respiratory Therapy and successful completion of the registry exams are required to obtain a license to practice as a respiratory therapist (RT) in all states except Alaska.

Students attend lecture, laboratory, and clinical courses during their time in the program. They must quickly become knowledgeable and skillful at performing clinical competencies and in the use of life-saving equipment. Becoming a professional in the field of respiratory therapy requires obtaining knowledge, demonstrating skills, and practicing professional behaviors relevant to the role of the RT. Students are required to communicate and collaborate frequently and effectively with one another and with instructors as they must learn to provide safe care and become members of an interdisciplinary healthcare team.

The faculty use teaching methods that actively engage students and regularly update curriculum to meet accreditation standards. The faculty have worked diligently to incorporate new methods of instruction such as flipped classroom, team-based learning, simulation training, and interdisciplinary education in the classroom. The curriculum is designed in such a way that it incorporates each required subject matter and topic as detailed in the Therapist Multiple Choice (TMC) Detailed Content Outline by the NBRC to prepare students for taking board exams after graduation. Graduating students obtain above average high passing scores on board examinations and frequently obtain jobs at local hospitals after becoming licensed clinicians. The program continues to have a renowned reputation within the community.

History

The Grossmont College Respiratory Therapy Program is accredited by the Commission on Accreditation for Respiratory Care (CoARC), and licensure is granted by the Respiratory Care Board of California. Grossmont College offers the only public Respiratory Therapy program in San Diego and Imperial Counties. The first class of 20 Respiratory Therapy students entered the two-year Associate in Science degree program in 1969, graduating in 1971. Each year since 1971, sixteen to forty-five students have completed the Respiratory Therapy Program. The program celebrated its 50th anniversary in 2019. The graduating class of 2021 is the 50th class making a difference in the lives of patients in the local community and the United States.

Respiratory Therapists, also known as Respiratory Care Practitioners, are allied health professionals trained and educated to care for patients in need of cardio-pulmonary support. Respiratory therapists assess, use diagnostic tests to evaluate, treat, educate, and provide care to patients from birth until the end-of-life. The role of the RT includes selecting, assembling, checking, and operating equipment. Respiratory therapists frequently care for patients with asthma, chronic obstructive pulmonary disease, pneumonia, those who have suffered traumatic injuries, premature babies, babies born by cesarean section, people who experience respiratory or cardiac arrest, and those in need of life support.

Respiratory Therapy began in the 1940's with oxygen technicians. Technicians transported oxygen tanks throughout the hospital; these oxygen technicians were almost always male because of the weight of the cylinders. Positive pressure breathing support for pilots during World War II led to advances in breathing techniques for pulmonary patients and Inhalation

Therapy was born. In the mid 1900's during the polio epidemic, machines that helped people breathe were produced in greater quantities. These specialized machines, called ventilators, required special training for clinicians. From the 1950's until formal training programs began in the 1960's inhalation therapists received on-the-job-training from the hospitals.

The expertise of the RT is ventilator management in intensive care units (ICU), a skill that has gained great notoriety in the last year due to the Covid-19 pandemic. Seventy-five percent of respiratory therapists work in hospitals, primarily in ICUs. They are also employed in physician offices, clinics, skilled nursing facilities, sleep labs, research departments, as case managers for disease management, and education. RTs work under the direction of a physician and within a healthcare team alongside other clinicians, such as nurses, and various members of the allied health professions. As members of a team, educating students to effectively communicate and collaborate with others is vital to patient safety. The full-time faculty use a team-based learning approach because we value engagement, retention, and success of our students. Our full-time faculty and other educators and leaders of the Allied Health and Nursing Professions at Grossmont College received the *Innovators of the Year* award in 2018 for leading the way in creating multidisciplinary events.

Educating students to practice skills without harming patients and work with other members of an interdisciplinary team are vital parts of becoming a competent and safe clinician. CoARC requires students to complete clinical hours and allowed programs to use high fidelity simulation labs to demonstrate necessary skills during the Covid-19 pandemic when hospitals limited student access. Without the ability to practice necessary skills in an accredited manner, the RT program would have been forced to temporarily stop classes and delay student graduation.

The Grossmont College Administration and Board members gave permission for students to complete required training in the lab as the need for Respiratory Therapists and skilled clinicians in the management of ventilatory support became a critical situation. The RT program has been dedicated to ensuring the utmost care and high-quality standards of cleanliness and upheld regulations for social distancing and use of personal protective equipment while students continued to gain experience as a quickly growing profession during uncertain times. Despite many changes in recent years, students continue to have high passing scores on board exams and excellent job placement within the community.

Student Success & Job Placement

The RT Program at Grossmont College continues to graduate students who pass board exams with high scores. After successful completion of the program and obtaining an ASRT degree, students must pass the Therapist Multiple Choice (TMC) exam at a high cut score to take the Clinical Simulation Examination (CSE). Students who pass both the TMC and CSE obtain credentials as a Certified Respiratory Therapist (CRT) and a Registered Respiratory Therapist (RRT). RRTs are eligible to apply for licensure to work in the state of California. Although we have yet to see the outcomes and success rates for students who completed lecture courses through Emergency Remote Training, Distance Education, and minimal hours in the

laboratory, we remain hopeful as student scores on board exams have continued to improve. The continued success of our graduates is evident in yearly statistics collected from CoARC.

3 Year Average Success Rates for Respiratory Therapy Exams 2012-2014

	CRT	RRT
Grossmont Community College	93.4%	71.4%
Concorde Career College	78.2%	38.8%
California College San Diego	78.3%	36.8%
Pima Medical Institute – Chula Vista	84.3%	60.7%
United States National Average		

3 Year Average Success Rates for Respiratory Therapy Exams 2016-2018

	CRT	RRT
Grossmont Community College	100%	95%
Concorde Career College	-	-
California College San Diego	-	-
Pima Medical Institute – Chula Vista	93%	84%
United States National Average	93%	80%

(http://www.coarc.com)

The US Bureau of Labor and Statistics (2020), projects employment of respiratory therapists in the United States to grow 19 percent from 2019 to 2029 which is must faster than average for most jobs. This number may exponentially grow as the need for essential healthcare workers has increased due to the Covid-19 pandemic. Growth in the middle-aged and elderly population will lead to an increased incidence of respiratory conditions such as Chronic Obstructive Pulmonary Disease and pneumonia.

Job placement for graduates has increased significantly since the prior program review report. Two of the three proprietary schools in San Diego County have closed in the last two years. The faculty has obtained a greater number of opportunities for students to participate in work externships. As a result, many students have obtained jobs at local hospitals. Several hospitals have opened new facilities, such as Kaiser Permanente and University of California San Diego. The job placement rate for Grossmont College Respiratory Therapy graduates in San Diego was below 70% in 2011. The job placement rate for the 2014 Respiratory Therapy graduates was 75.8%. The current job placement rate is 86%. The outlook for the graduates of 2021 appears brighter as hiring managers indicate they will need additional respiratory therapists and job opportunities are opening even prior to graduation for students.

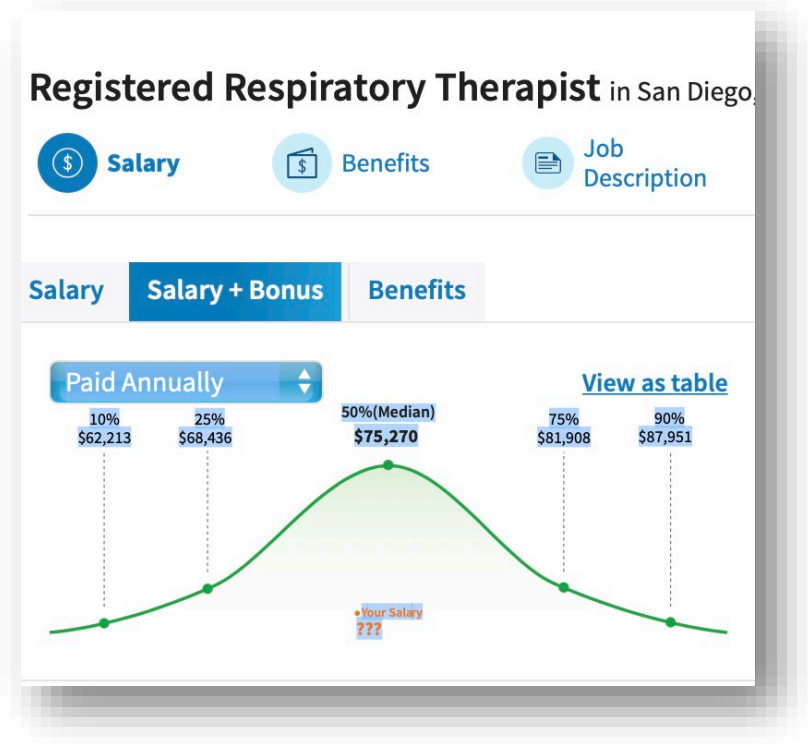
Program Cost

Grossmont College Respiratory Therapy Program will cost a resident student approximately $4,500 to complete the two-year program. To obtain a degree at a proprietary school in the San Diego area, a student would have to pay between $30,000 and $60,000 for the AS degree in respiratory therapy and the credits are not transferable to public institutions if the student wishes to advance their degree.

According to the US Bureau of Labor and Statistics (2020) and the Employment Development Department of California (2020), reports for median wage of RTs has increased over the last few years.

	United States	California	San Diego
RT Hourly Wage	$29	$40	$34
RT Yearly Wage	$61,000	$84,000	$75,000

(https://www.bls.gov/ooh/healthcare/respiratory-therapists.htm)
(https://www.labormarketinfo.edd.ca.gov/OccGuides/Summary.aspx?Soccode=291126&Geography=0604000107)



(https://www.salary.com/research/salary/benchmark/registered-respiratory-therapist-salary/san-diego-ca)

The program currently has 2-year waitlist for applicants as of April 2021. Enrollment and class size have increased over the last few years. Invitations were sent in March 2021 inviting a new cohort of approximately 36 students to start in the Fall 2022 semester.

"As a former graduate of the 1978 Grossmont College Respiratory Therapy program, I would like to state my support of the program and urge you to consider how important it is to the community. During my tenure as manager of the Respiratory Therapy Department at Kaiser Hospital, my team and I have tried to hire Grossmont graduates over any other graduates. Grossmont is the only affordable option available in San Diego. I have worked as a Respiratory Therapist here in San Diego since 1978 and feel fortunate and grateful to have been able to do so. None of this would have happened without the experience and education I received at Grossmont College."

Guillermo Friederichsen, RRT, RCP Manager Neurology, Pulmonary, Sleep and Respiratory Therapy Services, Retired, Kaiser Permanente San Diego

Faculty

The department has three full-time faculty members and seventeen adjunct faculty. The three full-time faculty teach most of the on-campus lecture and lab courses. Two of the full-time faculty have reassigned time as Program Director, Peggy Wells, and Director of Clinical Education, Rebecca Handley. Recommendations from previous Program Reviews advocated the need for three full-time instructors for the program. The advisory board and accreditation agency have continuously recommended and supported the need for three full-time instructors. Accomplishments for our program include the hiring of a third full-time faculty member, Carey Flores, and the tenure of two of the full-time faculty members. In 2016, Peggy Wells, Program Director obtained tenure after 30+ years of working at the college as a part-time faculty member. Carey Flores obtained her tenure in 2020. We are grateful for college's continued support of our program as this need was filled.

The turnover of part-time adjunct instructors has been high over the years. Salaries for working in the hospital setting were higher for many years than those received by educators with higher or similar credentials. The Program Director, Peggy Wells, presented a proposal to Administration and the Union to offer stipends equal to stipends Nursing and the Cardiovascular Program receive. Turnover of adjunct instructors has been less since the stipends were instituted. Availability of adjunct instructors is an ongoing challenge for the RT department.

Administrative Assistance

The Respiratory Therapy Department is small, and administrative is vital to our program's continued success. A considerable challenge for our department over the years have been the need for additional administrative support. Administrative support is required to maintain accurate department records, accept applications for admittance to the program, manage inquiries for new potential applicants, and is required by the Committee on Accreditation of Respiratory Therapy programs (CoARC). A part-time administrative assistant was hired in

2016. This position went vacant after requests were made to have the position FTE increased to full-time. We currently have an interim part-time Administrative Assistant who is also the Administrative Assistant for several other Allied Health professions: Cardiovascular Technology Program, Occupational Therapy Program, Orthopedic Technology Program, and the EKG/Telemetry Technician Program. We have requested a replacement for our program as several important tasks such as accepting and processing applications into our program and into clinical rotations have been delayed due to the need for administrative support.

Return to Campus & Facilities

Flexibility and perseverance are valued by our team. Possibly the greatest challenge for the department over the last year during the pandemic has been obtaining clinical placements for students in the hospital setting. In March 2020, most hospitals shut their doors to students to preserve personal protective equipment and limit the possibility for student exposure to Covid-19. The students were unable to practice essential skills due to hospital limitation and the closure of the Grossmont College campus where students practice skills in the lab. These were unforeseen circumstances, and the program was required to meet federal and state regulations and comply with hospital limitations. The faculty made efforts to find alternate ways to provide instruction while meeting CoARC accreditation standards. CoARC made temporary provisions for students to practice skills in a remote environment using electronic or virtual simulations. However, per CoARC accreditation standards, starting in the Fall 2020 semester, students had to resume in person learning and perform live demonstrations of skills competencies to complete required training.

In the Fall 2020 semester, students returned to campus with face coverings, practicing social distancing, and taking extensive measures to ensure their own safety, protect their classmates, staff, and faculty from being exposed to Covid-19. Protocols for cleaning, sanitizing, and disinfecting equipment and classrooms were implemented. The program faculty and students are immensely grateful for the provisions that were made by many for our students to be able to return to campus, especially the Division Dean, Nancy Saks, the college leadership and Administrative team, and the lab technician staff, Pat Murray and Dan Lopez.

The full-time faculty members worked hard and made exceptional efforts to collaborate and coordinate the return of students to campus. The Director of Clinical Education and the program faculty, including many of the adjunct faculty, changed their schedules and maintained flexibility to adapt to rapidly changing student needs and clinical placements. Assessing student competencies within the laboratory setting has been instrumental in the continuance of timely graduation of the students in the RT Program throughout the pandemic.

Instructors worked diligently to complete ERT and DE training, create online learning assignments, learn how to hold Zoom synchronous meetings and classroom sessions and figure out ways to have students actively participate during online learning sessions. Most lecture and lab courses have been taught by the full-time faculty members.

Through continued communication and collaboration amongst our Division leadership, the RT Department leadership, the hospital leadership, and the San Diego Consortium, students were able to resume their clinical placements at most of the local hospitals in the Spring 2021 semester. Critical training on the use of equipment and skills competencies are currently held in the laboratory on campus. Lecture courses continue to be given through synchronously and

asynchronously education using the Canvas online learning environment.

The Health Sciences Building has many excellent laboratory classrooms, two of which are complete with piped-in air and oxygen which is necessary to run ventilators and other equipment commonly used by RTs. Several of the laboratories have model patient care areas complete with hospital beds, lung simulators, high fidelity simulation manikins, ventilators, code carts, and other equipment used to monitor and care for patients in a hospital setting. The facilities and equipment adequately support student learning needs. Simulation is used to provide interdisciplinary education and collaboration between students of the Allied Health Care Programs in multi-disciplinary activities as circumstances permit.

The Respiratory Therapy Program is always changing and adapting to remain current with our community needs. Our Advisory Board is very active and recommends additions and changes to our curriculum. The National Board for Respiratory Therapy updates licensure exams every five years and publishes a document that lists the topics that should be included in curriculum in order to prepare students for taking board examinations. The document is called the TMC Detailed Content Outlines. The RT Program uses the content of the outline to modify and update course curriculum to assure students are being taught the necessary information to be successful. All of our courses were updated and approved by the curriculum committee in 2019.

1.2 Academic Program Review Committee Recommendations (2015-2021)

PURPOSE OF SECTION 1.2: To help the committee understand what the last program review recommendations were, and how your department addressed and implemented them.

1. *In the new student learning outcomes (SLO) cycle, tie SLOs to program outcomes.* ***COMPLETED***

During the previous cycle, information uploaded to the SLO website did not transfer over to TracDat and the original information was not retained. The Program Director worked diligently with other department coordinators and with the previous SLO coordinator to understand how to enter data into the current system and update the information. This was a process that took a significant amount of time given that there was no remaining documentation. Previous Respiratory Therapy Department records had historically been maintained on paper and due to retirements and change in facilities, the records were difficult to locate. The current Program Director, Peggy Wells, and the Director of Clinical Education, Rebecca Handley, have worked diligently over the last cycle implementing electronic systems that provide easy access by department members to important program and clinical information. All full-time faculty and administrative staff have access to TracDat, the S-Drive, and OneDrive where SLOs, course outlines, and important data are stored.

The course SLOs were updated and tied to program outcomes and approved by the Board in 2019. The Program Director, Peggy Wells, met with the previous Interim Dean of Allied Health and Nursing, Domenica Oliveri, to discuss how to update SLOs and tie SLOs to program outcomes. In 2018, the faculty met to discuss the importance of SLO's, discuss how to tie subject SLOs to course SLOs, and course SLOs to program outcomes. A comprehensive review was completed of every course and program SLO and course SLOs were revised as necessary. The PD provided guidance and training to the full-time faculty instructors regarding new processes for developing SLOs, tracking, documenting, and evaluating SLOs.

The Program Director reviews SLOs regularly and has a standing item on Department Meeting Minutes to provide updates and request tracking and evaluation of data during department meetings, including meetings with adjunct instructors. The full-time faculty members participate in the regular evaluation and documentation of SLOs. They are reviewed each semester by the full-time faculty who teach or oversee program courses to ensure accuracy, timeliness, and relevance to curriculum and curriculum updates. The current SLO coordinator, Felicia Kalker, reported in March 2021 that the Respiratory Therapy program is current with Course SLOs.

2. *Track the results of the new remediation program.* ***COMPLETED***

When a student scores less than 75% on any exam, remediation is mandatory in the respiratory therapy program. This mandatory remediation with the student includes scheduling a meeting with the instructor, completion of the Mandatory Remediation Referral Form, identification of problems and the creation of recommendations as well as an action plan that addresses problems identified.

The completed remediation forms are reviewed by the instructors of each course. Frequently, students state that not enough time was spent studying or preparing for the exam. As stated by the students, lack of exam preparation is the most frequent problem identified. Occasionally, students will state that they misread questions, changed correct answers to wrong answers, or hurried through the exam. Rarely, problems can be identified as misconceptions of curriculum. At times, these misconceptions can be identified in what the program would consider as critical thinking questions such as questions on exams that include a patient scenario requiring the application of critical concepts from the curriculum. Once a curriculum misconception is identified, the action plan can include remediation such as specific topic review, regular attendance in open labs, and/or one-on-one tutoring. Occasionally, students will state the demands of their work schedule interferes with the student's ability to have enough time to study. As a result, the recommendation of reducing work hours as been added to the agenda of the New Student Orientation. When students can reduce work hours, faculty have seen a trend in improvement of test scores. Additionally, the program has increased the number of open lab hours available to all students during each semester.

3. *Consider adding more hands-on, instructor-led learning experiences to the lab courses.* ***COMPLETED***

The laboratory sections of courses have been modified to include instructor-led learning experiences each time a student comes to the lab. The specific objectives for each laboratory assignment are listed in the syllabus. Each learning experience begins with an explanation of the student learning objectives and how students should systematically review information and complete assignments. Learning objectives can be found within the syllabi of each course in the RT Program and are reviewed by the instructor on the first day of class. Specific weekly learning objectives are available for students to view in Canvas, on lab assignments, and are verbally reviewed by each instructor on an ongoing basis throughout the semester. Videos demonstrating competencies were developed by laboratory instructors to facilitate student understanding and successful completion of competencies.

Instructional content is provided through the Canvas learning environment prior to lab experiences. This information can be read or viewed asynchronously by students. Students are encouraged to complete the learning in a flipped classroom manner prior to coming to the lab to be able to utilize class time to perform and develop skills. Instructional materials are posted in Canvas for students to read, watch, listen to, and work with other classmates as they prepare for live learning experiences. It is our goal prior to each laboratory exercise to involve students in the learning process. Examples of asynchronous instructional content provided before laboratory experiences includes reading from textbooks, watching videos or virtual lessons posted by the instructor, looking up information from medical journals, and/or participating in virtual simulations caring for patients with cardiopulmonary diseases.

Instruction is provided at the start of each laboratory experience, giving guidance for how students can complete the hands-on portion of the lab. During the lab session, the instructor reviews the goals and objectives of the assignment and gives demonstrations of skills that students will need to perform. Each lab has been revised to include a hands-on experience for students to complete. The students are asked to demonstrate skills and given an opportunity to have a kinesthetic learning experience with feedback from the instructor prior to being

assessed and/or demonstrate competency in the lab. Methods used for return demonstrations include the return demonstration or Teach Back Method and the Rapid Cycle Deliberate Practice (RCDP) (Talevski, Wong Shee, Rasmussen, et al., 2020). The RCDP method is used during simulation training to give frequent and timely feedback to students as they practice critical skills so that areas requiring additional education can be promptly identified to improve patient safety (Brown, Mudd, Perretta, et al., 2021)

After students are given multiple opportunities to practice skills, and have received timely in-person feedback, they are checked and assessed for competency. Competency-based skills performance testing is done using high fidelity simulators or lung simulators in the lab. Respiratory Therapy continues to update lab equipment and supplies to match community standards. The current budget, Perkins's funding, and one-time College funds have allowed us to maintain state of the art equipment. The division dean continuously assists us in obtaining funding for needed equipment through grant writing. RTs use life-saving equipment, and it is crucial for the continued success of our students and program that we regularly assess our equipment needs.

4. *Work with East County Alliance (ECA) to recruit more students. Plan to work with other Allied Health Departments and reach out to ECA.* ***COMPLETE***

The previous Dean of Allied Health and Nursing, Debbie Yaddow, attended meetings with East County Alliance on behalf of the division. The full-time faculty members participate in collaborative efforts to promote the program at the college and in the community. Program Previews are given monthly either in-person or online as circumstances permit. Faculty coordinate visits with other departments to promote the RT Program at Grossmont College and the RT profession in biology, anatomy, physiology, and microbiology classes as they are pre-requisite courses for entry into the program. Other promotional efforts include giving out flyers, placing posters, and working with students to create YouTube videos. We currently have a two-year waiting list for entry into the program.

5. *Using the Course History Information Report, continue to submit curriculum modification proposals for those courses that have not been reviewed by the Curriculum Committee in more than four years or curriculum deletion forms for those courses that have not been offered in the last three years.* ***ONGOING***

Curriculum modification proposals were reviewed by the Curriculum Committee for all courses within the program in 2019. The Governing Board approved all revisions on May 21, 2019. The RESP 270 course was last given in the Spring 2016. A deletion form was submitted to the Curriculum Committee in 2019 as it had not been offered in the last three years.

6. *Use student-learning outcome data for continued course and program improvement.* ***ONGOING***

The SLO process opens discussions and allows collaboration between all faculty to ensure that we are providing the needed education for our students. Health care is a dynamic field, and the respiratory therapy profession is in a period of transition and growth. Our goal is for each student to graduate and pass all required exams as quickly as possible after graduation in order to obtain employment. Course SLO's are listed in each syllabus and Program SLO's

are posted in our classrooms, as well as being listed in each syllabus and in the RT Student Handbook.

The course SLOs were updated and tied to program outcomes in 2018. The Program Director, Peggy Wells, met with the previous Interim Dean of Allied Health and Nursing, Domenica Oliveri, to discuss how to update SLOs and tie SLOs to program outcomes. In 2018, the faculty met to discuss the importance of SLO's, discuss how to tie subject SLOs to course SLOs, and course SLOs to program outcomes. A comprehensive review was completed of every course and program SLO and course SLOs were revised as necessary. The PD provided guidance and training to the full-time faculty instructors regarding new processes for developing SLOs, tracking, documenting, and evaluating SLOs. Additional data for how the Respiratory Therapy Program uses SLO data for continued course and program improvement can be found in Section 3- Student Learning Outcomes.

1.3 Academic Program Review Committee Recommendations (2009-2015)

1. *Based on current market salary research, work with the faculty bargaining unit to develop a vocational educational pay scale to make salaries competitive. COMPLETE*

During the previous program review cycle, there was no implementation of this recommendation because the emphasis was on promoting and improving the Respiratory Therapy Program and on increasing the job placement rate in the community.

This goal was pursued and accomplished within the last six years by the Program Director, Peggy Wells, and supported by the Union. The faculty now receive a stipend to maintain compensation at a competitive rate with the earnings that RTs make when working at hospitals. The stipend has resulted in less turnover in our adjunct faculty.

2. *Plan for equipment and instructional needs in the new building and continue to pursue grant funding to provide and maintain state of the art equipment necessary to train students. ONGOING*

The Respiratory Therapy Department continues to update lab equipment and supplies to match community standards. As previously mentioned, the current budget, Perkins's funding, and one-time College funds have allowed us to maintain state of the art equipment. The division dean continuously assists us in obtaining funding for needed equipment through grant writing. With the support of the Division Dean, Nancy Saks, provisions were made for us to obtain the necessary equipment to support growing student needs during ERT. Money was needed for additional supplies, personal protective equipment, and for tutoring to support our instructors.

During the pandemic, the state mandated that ventilators be loaned to the community to provide life support for patients at hospitals. The program loaned ventilators to Kaiser Permanente and Sharp Grossmont Hospitals.

The Health Sciences Building has many excellent laboratory classrooms, two of which are complete with piped-in air and oxygen which is necessary to run ventilators and other equipment commonly used by RTs. Several of the laboratories have model patient care areas complete with hospital beds, lung simulators, high fidelity simulation manikins, ventilators, code

carts, and other equipment used to monitor and care for patients in a hospital setting. The facilities and equipment adequately support student learning needs. Simulation is used to provide interdisciplinary education and collaboration between students of the Allied Health Care Programs in multi-disciplinary activities as circumstances permit.

3. *Work with Counseling Department and Articulation Officer to pursue a 2+2 Bachelor's degree with local universities*. *ONGOING*

No implementation of this recommendation currently. The state must make provisions for RT Programs at community colleges to offer a bachelor's degree. Currently, there are two pilot programs in the state of California. The RT Program at Grossmont College has continued to network with qualified personnel in ongoing efforts to pursue instating a bachelor's degree. This must be a continuing goal as the professional organization and the State licensure board is moving towards requiring a bachelor's degree in the very near future. The Program Director and Division Dean have had preliminary discussions relating to this goal. AB 927 is currently in committee in the State Legislature.

4. *To meet the needs of a rapidly changing profession, develop new courses and revise current course outlines. ONGOING*

Collaborative efforts were made by the full-time faculty who reviewed and revised all course outlines in 2018. Changes were brought to the Curriculum Committee and approved by the Governing Board in 2019.

A course was added during the last cycle, RESP 220: Sleep disorders, Diagnostic Procedures, and Treatments. Sleep medicine is a growing field within respiratory therapy and there is a need for additional personnel that specialize in this field. RTs may obtain a specialty certification after passing their RRT board exams. Many of our students and clinicians in the community have returned to Grossmont College to become knowledgeable in the use of equipment and assessment techniques of sleep medicine.

5. *Seek funding sources to maintain currency through conference and seminar attendance and other professional development activities. ONGOING*

Perkins funds as well as Professional Development funds are being used to support continuing education for our full-time and adjunct instructors. Adjunct instructors are encouraged to attend professional development experiences to improve teaching and learning. Each year, adjunct instructors are offered the opportunity to attend professional development conferences or classes. In the last few years, we have been able to offer this opportunity to anyone that applied.

6. *Continue marketing and recruitment strategies to attract qualified applicants and enhance the visibility of the program to the community. Continue informational meetings for prospective students*. ONGOING

Marketing and recruitment strategies have increased over the past six years. The Department developed flyers, posters, and lawn signs to promote interest in the program. Full-time

instructors visit Biology, Anatomy, Physiology, and Microbiology classes to generate interest in the RT Program. Along with Allied Health and Nursing information sessions, the Program Director and a full-time faculty member sponsor Program Preview session monthly. The Program Director visits High School and Community Health and Career Fairs. The Respiratory Therapy Program has also participated in the HASPI (Health and Science Pipeline Initiative) by providing tours for high school students twice yearly. We continue to need Administrative support.

7. *Replace faculty upon separation from the College. COMPLETE*

The department has three full-time faculty members and seventeen adjunct faculty. The three full-time faculty teach most of the on-campus lecture and lab courses. Two of the full-time faculty have reassigned time as Program Director, Peggy Wells, and Director of Clinical Education, Rebecca Handley. Recommendations from previous Program Reviews advocated the need for three full-time instructors for the program. The advisory board and accreditation agency have continuously recommended and supported the need for three full-time instructors. Carey Flores was hired in 2015 as the third full-time faculty member for the RT Department. She obtained tenure in the Spring of 2020.

8. *Submit curriculum modification proposals for those courses that have not been reviewed by the Curriculum Committee in more than four years or curriculum deletion forms for those courses that have not been offered in the last three years. COMPLETE*

Curriculum modification proposals were reviewed by the Curriculum Committee for all courses within the program in 2019. The Governing Board approved all revisions on May 21, 2019.

9. *Use student-learning outcome data for continued course and program improvement. ONGOING*

Student-Learning-Outcomes were reviewed with faculty once or twice each year. Changes were made to the SLO's and courses were evaluated according to schedule. Curriculum changes are made by assessing student professional exam results. The NBRC provides results by category for each student and each class. The Program Director provides information to all instructors and curriculum is reviewed to assure student attainment.

SECTION 2 - CURRICULUM DEVELOPMENT AND ACADEMIC STANDARDS

2.1 How Curriculum is Developed and Maintained

PURPOSE OF SECTION 2.1: **To describe how curriculum is maintained and/or developed.**

2.1a Degrees, certificates, and course changes.

Degrees and certificates remain unchanged since the last program review in 2015.

A course was added during the last cycle, RESP 220: Sleep disorders, Diagnostic Procedures, and Treatments. Sleep medicine is a growing specialty and there is a need for additional personnel that specialize in this field. RTs may obtain a specialty certification after passing their RRT board exams. Many of our students and clinicians in the community have returned to Grossmont College to become knowledgeable in the use of equipment and assessment techniques of sleep medicine.

One course was deleted during the last cycle, RESP 270: Respiratory Therapy Review. This course was last given in the Spring 2016. It was not required as part of the core curriculum for students to complete. There was a high attrition rate for this course for this reason. A deletion form was submitted to the Curriculum Committee in 2019 as it had not been offered in the last three years. Students complete an intensive exam preparation course during the final semester in the RT Program. Students also complete upward of 84 units to obtain an ASRT degree. CoARC has recommended in recent years limiting the quantity of units that students are required to complete to obtain an associate degree in respiratory therapy.

2.1b Equity Minded Curriculum

Our department had a robust discussion at a recent department meeting of how we are and can improve our efforts to be equity minded. We discussed the ways in which we are consistent in providing resources to our students, mindful of student learning needs, and how we provide individualized instruction within our department. The department faculty have implemented changes to our Canvas courses to provide a welcoming environment for students, use plain language, and dissipate differences in identity categorization in written and verbal statements. Examples of how instructors within the RT Program equity are minded are included in Section 5 of this document. The Program Director and a full-time faculty member have attended Academic Senate meetings where Equity, Diversity, and Inclusion have been discussed. The PD has also attended the Academic Senate Anti-Racism Call to Action meeting, and several faculty members attended Convocations where keynote speakers addressed these topics. Team Based Learning is used in several of the courses in the Respiratory Therapy Program and teachers have been trained to address different learning styles and incorporate engaging student learning activities during class that can be applied to different genders, ages, ethnic groups, students who are ESL, and students with different disabilities.

2.2 Course Outline Review

PURPOSE OF SECTION 2.2: **To understand your practice for reviewing outlines. For example: under what circumstances do you submit a new course, a modified course, or a course update to the curriculum committee?**

2.2a Meeting Accreditation Standards

Courses are reviewed for accuracy and updated to reflect current industry standards with minor revisions made at the course level annually, and major revisions submitted to the curriculum committee. The Respiratory Therapy Program successfully passed an accreditation visit in 2012. The next accreditation visit is expected in 2022. The RT department is in the process of creating institutional memory and making electronic resources for course outlines, curriculum books, and other important documentation that is required for the college accreditation and by CoARC.

All course outlines and curriculum were evaluated in 2018, and changes were made for improvement. The number of units for each course has remained unchanged over the last program review cycle. Writing, reading, problem-solving skills, quantitative reasoning, and critical thinking are crucial areas that are infused into each course. Textbooks used are all current editions and contain material that promotes and encourages critical thinking. Many texts have workbooks and internet or CD resources to aid the student in understanding concepts. The use of technology is encouraged in the classroom in ways that promote student engagement in learning course material and active participation.

The curriculum is designed in such a way that it incorporates each required subject matter and topic as detailed in the Therapist Multiple Choice (TMC) Detailed Content Outline by the NBRC to prepare students for taking board exams after graduation. The most recent review of course curriculum was completed at the beginning of the Spring 2021 semester when the NBRC published a revised TMC Detailed Content Outline. Each item was reviewed and assessed by full-time and adjunct faculty and methods for how each item is incorporated into the courses was discussed. Students are required to take a Final Program Exam given by the National Board of Respiratory Therapy (NBRC). The results are tabulated and along with a score for each student there is a summary of the types of questions incorrectly answered by each student as well as the class. Faculty reviews the results of these exams and uses the results to check the currency of the curriculum. Graduating students obtain above average high passing scores on board examinations.

Work Experience courses were reviewed, and agreements negotiated with local facilities. Externship were previously offered but were discontinued after the Summer of 2010 because of the budget. Externships began again in Spring 2012 with 3 students. The externships allow students to gain more clinical experience and give them practical work experience that help these students obtain jobs. Between 2016 and the Spring of 2020 we placed between 10-13

externs per semester at Kaiser Hospital, Rady Children's Hospital San Diego, and University of California San Diego Sleep Laboratory. We are actively recruiting more placement opportunities. During the pandemic and the limitations hospitals placed on students, the externships were temporarily put on hold. Some of the hospitals have begun accepting volunteers and student workers again during the Spring 2021 semester.

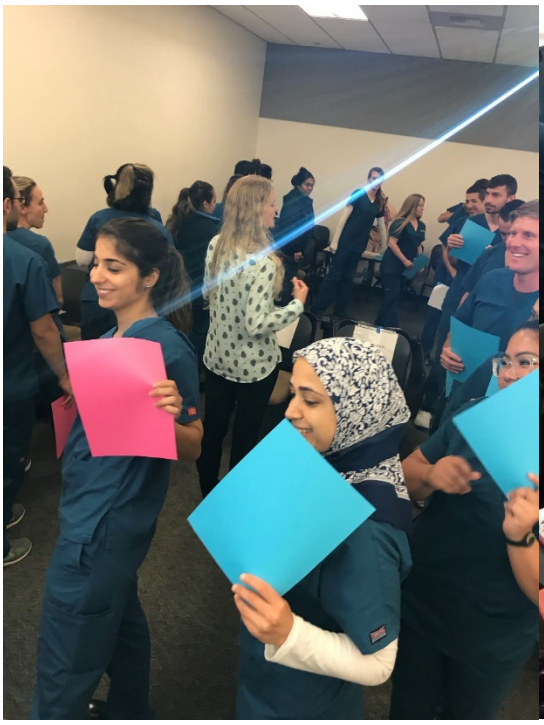
2.2b Approval of Curriculum

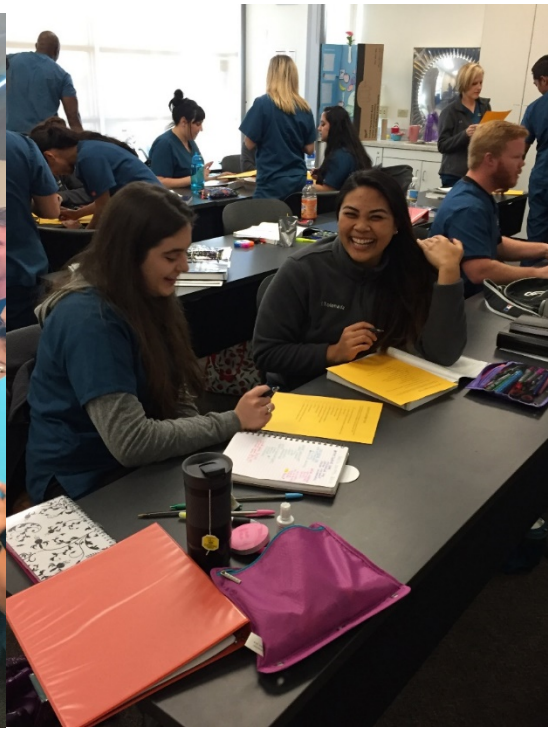
Curriculum modification proposals were reviewed by the Curriculum Committee for all courses within the program in 2019. The Governing Board approved all revisions on May 21, 2019.

2.3 Current, Relevant, and Engaging Courses

PURPOSE OF SECTION 2.3: Explain how you incorporate new material in your courses on a semester-to-semester basis to maintain relevance and address current issues related to your discipline within the existing course outline.

The Respiratory Therapy Department keeps our instructional resources, delivery, content, materials, and syllabi current and relevant to student academic and career needs by continuous review and revision by faculty, advisory board, students, and our accreditation agency. Students' complete confidential surveys of each course at the end of each course and the instructors receive constructive feedback and develop an action plan to address appropriate concerns. Faculty, advisory members, and graduates also complete yearly surveys to review the relevance of resources, content, and delivery methods.





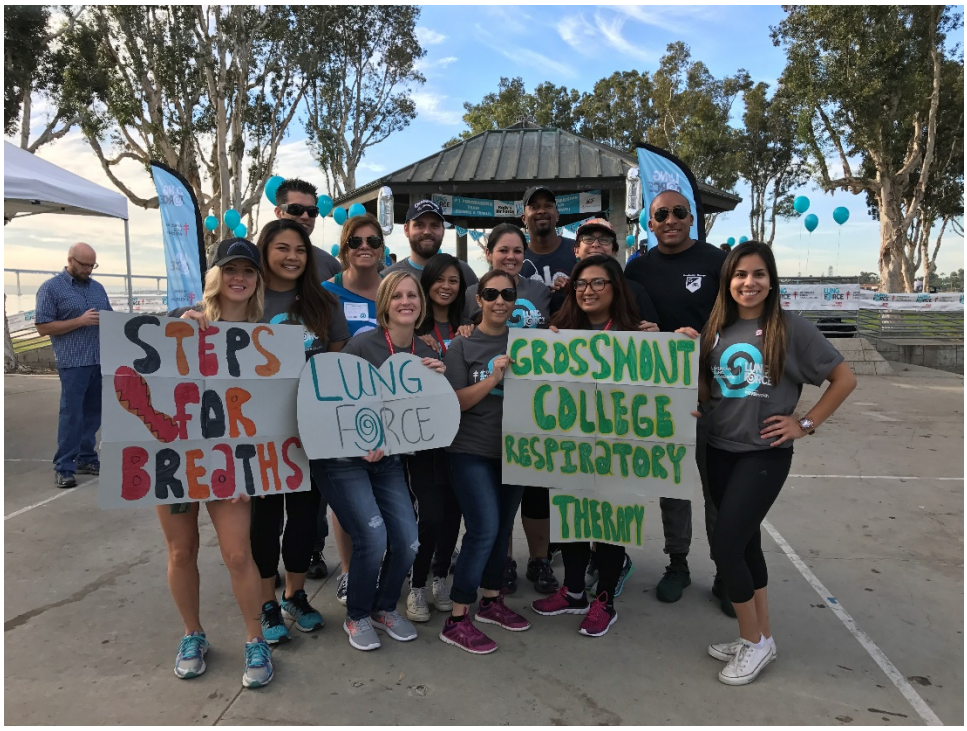
The faculty use teaching methods that actively engage students and regularly update curriculum to meet accreditation standards. The faculty have worked diligently to incorporate new methods of instruction such as flipped classroom, team-based learning, simulation training, and interdisciplinary education (IPE) in the classroom. All full-time instructors were issued I-Pads and laptops to use as a teaching aid. Several respiratory therapy classrooms have I-clicker system installed. I-Clicker education has been presented at staff development meetings and at an Allied Health and Nursing Division meeting. Our Dean supports continued education and encourages flipping the classroom concepts, team-based learning, IPE, simulation training, and the use of technology in the classroom.

An example of a flipped classroom format is in RESP 105, Cardiopulmonary Physiology and Disease Entities in which students complete a pre-class learning assignment that includes reading and writing about hemodynamic measurements and the function of the heart and circulatory system. When students arrive in class, they are asked several questions to assess learning prior to engaging in class activities. The students are then encouraged to participate in actively pretending to be “red blood cells” in circulating blood that carry oxygen to the tissues and carbon dioxide away from the cells and return them to the lungs for gas exchange. During the activity, the instructor creates barriers to blood flow so that students can see how blood might “back-up” into the lungs if the left side of the heart is not functioning properly. After the activity, the students are asked the same questions that they were asked at the beginning of the class session to assess for desired student learning outcomes. The quantitative and measurable outcome is that student learning has improved greatly after the class activities. The image below shows a picture of students participating in this class assignment.

The full-time faculty completed ERT training and Distance Education training since the previous program review. The Program Director teaches a Distance Education course using a hybrid model. During the pandemic, lecture courses are being offered by ERT with the use of synchronous and asynchronous online sessions, discussion boards, and virtual lessons. Because these circumstances are temporary, curriculum changes have not been submitted for the official course outlines. The goal is to return courses to on-campus training as much as possible given that students must learn how to work as members of an interdisciplinary team and timely and effective communication if a fundamental skill to become a future clinician.

Respiratory Therapy is a dynamic, rapidly changing field. As clinicians', respiratory therapists must be familiar with environmental, societal, ethical, political, and technological issues. Students continually provide patient assessment and education to determine causes for specific diseases and disorders, identify appropriate treatments, and make suggestions to improve outcomes. Ethics discussions are included every semester. For instance, a student might learn about causes and incidence of asthma, a common obstructive pulmonary disease. Students will learn about the causes of asthma, such as genetic predisposition, and the aggravating factors that can cause someone to have an exacerbation. Some of the aggravating factors include dust mites, exercise, and seasonal allergens such as pollen. Another aggravating factor is pollution. People who live in more densely populated areas and urban areas where they are exposed to chemicals, factories, and environmental pollution have increased incidence of asthma exacerbations. Students learn about the disproportionate impact and oppression of the population and discuss strategies for improving health outcomes. Upstream solutions to common health problems must start at an institutional level, and the Grossmont College faculty incorporates these topics into curricula to raise awareness and help students understand how they can make a difference in the community.

Students are required to complete 10 hours of community service each semester. An example of how environmental and social factors play a role on someone's health is the example of a person who smokes or vapes. Students participate as volunteers for the American Lung Association walk each year, promoting healthy air, smoking cessation, and raising funds for research about lung cancer. We maintain regular contact with the volunteer coordinators for the ALA to offer a variety of experiences for participating in community service each semester.

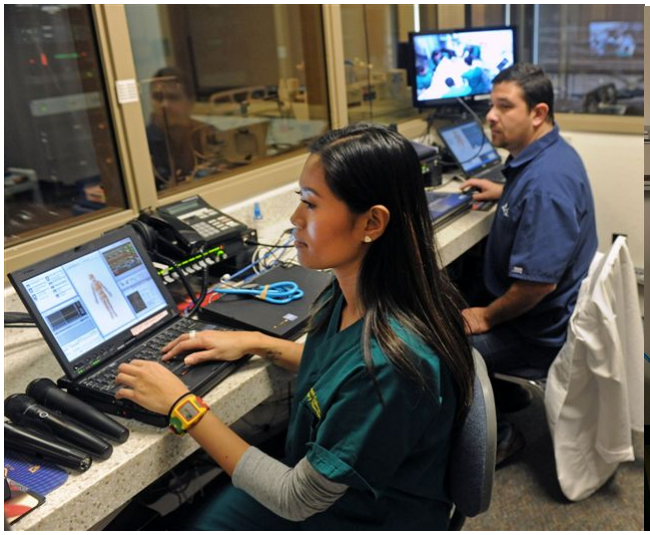


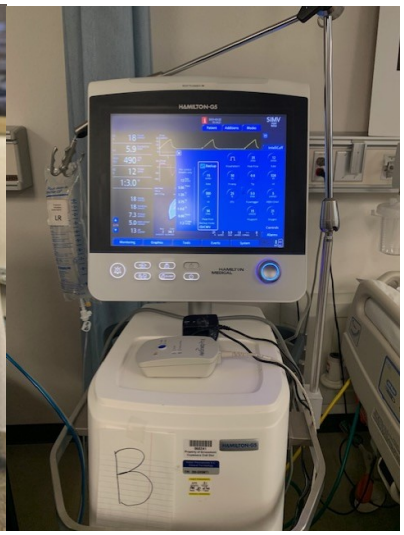
The Program Director invites guest speakers from the community to come to RT Program events, such as during Respiratory Care Week for the students to gain a broader perspective of the profession.

Respiratory Care Week
Guest Speaker, Mike Madison,
President of the California Society for Respiratory Care in 2018

Discussions about other ethical issues include the termination of life support, allowing patients to make decisions regarding their personal health care, and providing safe care to patients even when asked to take short cuts by others. Each student must complete an ethics course given by the California Society for Respiratory Care (CSRC) or the American Association of Respiratory Care (AARC) during the last semester of the program, which is a requirement to obtain licensure in the state of California.

Respiratory Therapy is a field that utilizes technology daily. Patient monitoring devices, treatment options, and life-support systems use current computer technology, and this technology is constantly changing. Instructors use state-of-the-art equipment and supplies to instruct students in current techniques and care of patients. The college has purchased ventilators that are those commonly used in the United States and in the greater area of San Diego so that students practice using the most recent microprocessor ventilators prior to clinical practice in the intensive care units at local hospitals.





A recent change made after the Spring 2020 semester after courses went from face-to-face training to synchronous online meetings, was the implementation of new policies regarding the use of technology and technology needs for students. The Respiratory Therapy Student Handbook 2020-2022 and the course syllabi for all classes within the program list specific technologies that students will need in order to successfully complete the RT Program. A Canvas course was also created during the Summer 2020 semester to provide an online orientation and resources for students entering the program. Students are required to complete a quiz using remote proctoring, complete specific tasks such as submitting an assignment, and set-up personal profiles in Canvas prior to the start of the program. These new

implementations have helped resolve some of the technical issues that students previously encountered. The RT Department has ongoing discussions about how instructors can assist students and one another with technological issues.

2.4 New Faculty Orientation and Department Policies and Communications

PURPOSE OF SECTION 2.4: **To describe what the department does to maintain consistently high academic standards amongst its faculty.**

New Faculty Orientation

New instructors receive one-on-one orientation from either the Program Director or the Director of Clinical Education using the Respiratory Therapy New Instructor Orientation Checklist. The Orientation Checklist can be seen below.

ADJUNCT INSTRUCTOR ORIENTATION CHECKLIST
Respiratory Therapy Program
Grossmont College

- Respiratory Therapy website: http://www.grossmont.edu/academics/programs-departments/health-professions/rtprogram/default.aspx
- Student Handbook: http://www.grossmont.edu/academics/programs-departments/health-professions/rtprogram/student-handbooks.aspx
- Student Learning Outcomes
- Student dress code
- Student attendance policy
- Faculty Absence Reporting: Dean's Secretary, Christine Girsch: 619-644-7149
- Currency of RCP License, CPR card, CEUs, immunizations, resume, TB test
- Syllabus Requirements: http://www.grossmont.edu/faculty_staff/syllabusresources.asp
- Attendance at faculty meetings
- Faculty Evaluations and Staff Development
- Payroll: 619-644-7902
- Who to contact: Peggy Wells 619-644-7813, Peggy.Wells@gcccd.edu Rebecca Handley Rebecca.Handley@gcccd.edu, RT Department 619-644-7448.
- Web Advisor/ Self-Service and Canvas training
- Student Remediation, Communication and Grades

The above checklist has been reviewed with me by the Program Director or the Director of Clinical Education. The faculty member being trained, Program Director, and/ or Director of Clinical Education sign and date that the required training has been completed.

Department Policies and Communications

The three full-time instructors meet weekly during office hours when on campus, and on a monthly or bi-monthly basis through Zoom during the campus closure. Full-time faculty maintain daily or weekly contact through email, or by phone. Department meetings with adjunct faculty are held at least twice during the semester. The PD and DCE support the adjunct instructors with personal contact and email correspondence. The DCE visits each adjunct clinical instructor at the clinical site once or twice during the semester. The PD is on campus during adjunct courses to serve as a resource for the adjunct instructors. The third full-time faculty member has helped answer questions about the use of technology and resources available to adjunct instructors. The three full-time faculty members evaluate each other as peers and evaluate adjunct instructors regularly per college policies.

At our yearly Advisory Committee meeting mandatory CoARC standards are reviewed and discussed. These standards directly relate to our academic standards, and department policies. The Respiratory Therapy Department develops and reviews SLO's and assessments during faculty meetings and workshops.

The RT Department handbook has policies that must be adhered to by all students in entering the program. Syllabi for each course within the program incorporate and mimic the standards in the handbook. For example, students must obtain an average of 75% or greater on exams within any given course. All courses except for clinical courses require students to take several exams throughout the semester. The average of the exam scores in any given course must be 75% or greater to successfully move forward to the next semester in the program. Students who obtain less than 75% on any exam are required to meet with the lead instructor for the course and undergo a remediation in which barriers to learning are identified and a plan is designed to help students achieve practical goals to aid in successful completion of courses. Faculty are required to maintain these standards within each course. The PD and DCE review syllabi for completion and accuracy each semester. The PD requires that faculty inform her regularly of students who are not achieving exam scores of 75% or higher.

Grading Consistency

Three of our on-campus lecture courses have two sections each. Typically, they have consistently been taught by the same instructors. In the case of a course having multiple lab sections, the instructors work together and collaboratively design the lesson plans and exams as a team and create a key for the correct responses. The same instructor typically teaches the same subject to multiple sections of the class so that information is consistent for all students. In most cases both instructors are present for each section exam. The same rubrics are used for all sections of a course.

All instructors include course outlines, course and program objectives in syllabi. The Respiratory Therapy Department uses specific templates developed in collaboration with the Allied Health and Nursing Division. Course syllabi contain specific department policies and procedures that may not be altered as well as course information specific to an instructor or course. Course syllabi are reviewed by the Program Director and Director of Clinical Education for appropriate content and to ensure that all policies and required components are included.

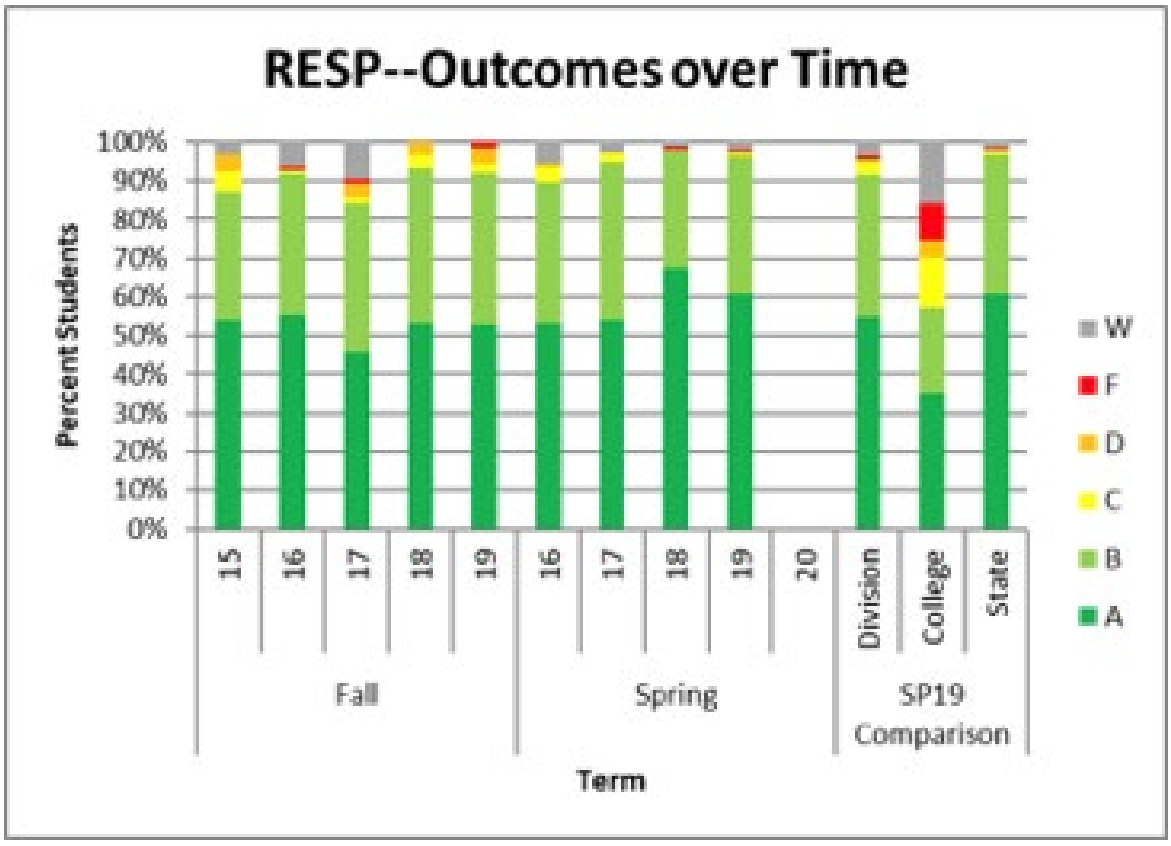
Rubrics are used to evaluate student work. All instructors use a standard Daily Evaluation Form to evaluate student performance. Another method used to evaluate the program is an internal Program Resources survey. This instrument was developed by our accrediting body and is used to assess and monitor the program's resources. The survey is given to students, faculty, and advisory committee members. It is an excellent accountability instrument and helps identify areas of strengths and weakness.

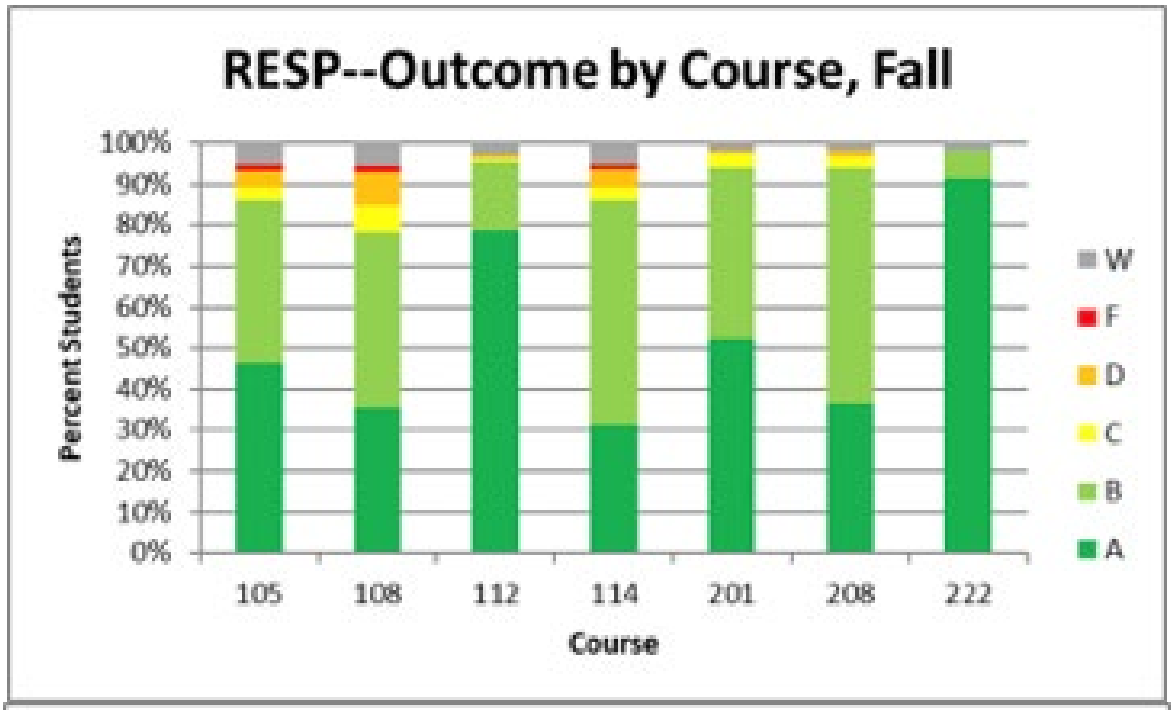
Our clinical courses have many sections and many instructors at different facilities throughout San Diego. Inter-rater Reliability was a required standard from CoARC, our accreditation body, up until the Spring 2021 semester. One of the CoARC standards was that the program had to develop processes for assessing students that were reliable between one clinical instructor and another when grading student performance of clinical skills. Training was provided yearly by the DCE during department meetings. Changes in standards were

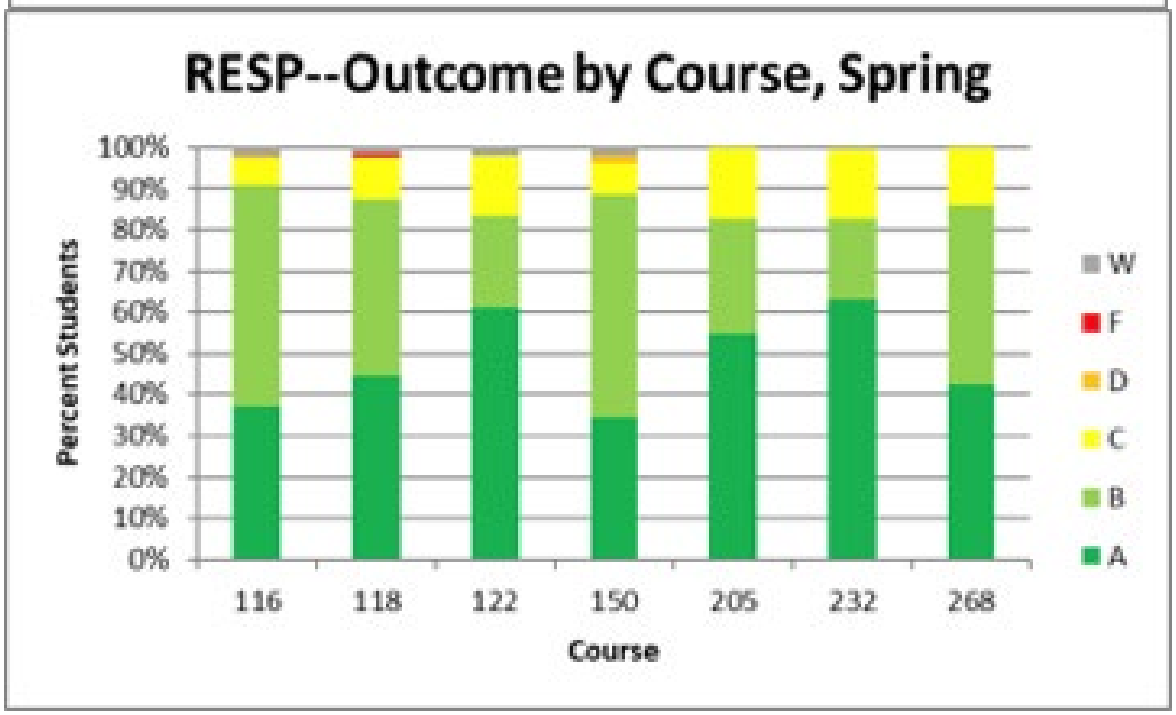
discussed at a department meeting in April 2021 with the full-time and adjunct instructors present. Communications about agenda items are sent to adjunct faculty who are unable to attend by the DCE or PD after the meetings in which CoARC standards are discussed as this is an accreditation requirement for RT Programs.

2.5 Grade Distribution Summary

PURPOSE OF SECTION 2.5: **To gauge the overall patterns of student success, retention, and grade distributions across the course offerings in your department. Here the committee is looking for explanation on unusually generous or rigorous grading patterns.**







The overall success rate of students in the Respiratory Therapy Program is compared to the college average. Students that enter our program have already completed difficult prerequisites, completed a lengthy application process, and may have waited up to two years to enter the program. This preparation and waiting period help to admit students focused on obtaining a profession, and therefore are serious about course requirements. Students that do not pass a course with a 75% or better are required to drop from the program and apply for re-admittance the following year. Prior to program re-admission, students are required to take re-entry exams, meet with the Program Director to discuss study habits and recommendations for how to succeed and prepare for classes. These factors are responsible for a greater number of “A” and “B” grades, and fewer “C”, “D”, and “F” grades than in the general student population.

Returning students are asked to follow a process, submit departure and re-admission paperwork to the PD, and meet with the PD prior to exiting the program and prior to returning. They are given re-entry exams for the courses that they previously passed and assessed for clinical skills competencies within a high-fidelity laboratory using simulation.

Analyzing the data for Fall 2015 through Spring 2020 demonstrates that students withdraw or fail courses more frequently in the first year of the program than in the second year. The Respiratory Therapy Program is time intensive requiring many hours of study time outside of the classroom, lab, and clinical hours. Many of our students must work to provide for themselves and their families and are unable to meet the time demands of the program. In the first Fall semester of the program there is not one course that students fail or withdraw from more frequently than from the other courses. The same is true for the Spring of the second semester. The third and fourth semesters have a much higher passing rate than the first two semesters with equal success in all courses. Students are more likely to withdraw during or following the first semester of the program.

2.6 Comparison of Retention and Success Rates of Online versus In-Person Course

PURPOSE OF SECTION 2.6: **To evaluate the department's success with course delivery methods in online vs. hybrid vs. face-to-face platforms.**

The Program Review Data Liaison, Bonnie Ripley, informed us in her report that this data was not applicable to our department.

2.7 Course Articulation with High Schools

The Respiratory Therapy Program does not have courses that have been formally articulated with high schools.

2.8 Articulation with Four-Year Institutions

PURPOSE OF SECTION 2.8: **The committee wants to gauge if students are able to transfer successfully to four-year universities via your articulation agreements.**

All courses in the Respiratory Therapy Program are transferable to the California State University system except for RESP 270 which was an optional course that has not been offered since 2016. The forms to delete this course were submitted to the curriculum committee. Per the current Articulation Officer, "The courses in RT are satisfactorily articulated." Refer to Appendix 4 for the letter from the Articulation Officer, Dee Aceves.

Respiratory Therapy will soon require a BS degree to obtain a license in California. We must begin to actively research and collaborate with other institutions that offer a BS in Respiratory Therapy. The program has begun to research articulation.

SECTION 3 – STUDENT LEANING OUTCOMES (SLOs)

PURPOSE OF SECTION 3: To show how SLO assessments are used to improve teaching strategies, develop curriculum, modify and/or update curriculum, and guide program planning.

3.1 SLO Assessment

Previously, the RT Department had a goal to "update all student learning objectives and use the student learning data outcomes for continued course and program improvement". This goal has been accomplished. Since 2015, the RT Department has collected data, shared the data in department meetings with faculty including adjunct instructors, and used the data to facilitate student learning. New recordkeeping systems have been instituted to help track and use data appropriately. The full-time faculty members each have access to view SLOs in TracDat and have been informed of the dates that SLOs should be assessed. The Program Director reviews all SLOs and deadlines for assessing them at the beginning of each semester. The PD shared this information at the beginning of the semester with the faculty during a department meeting. Instructors in courses with required evaluation of SLOs are reminded of the need for evaluation, the evaluation process is reviewed, and the resource for where to locate the form on the college website is sent to eh instructors with a required due date. The evaluations are reviewed at the department meeting following the evaluation date.

During the previous Program Review cycle, information uploaded to the SLO website did not transfer over to TracDat and the original information was not retained. The Program Director worked diligently with other department coordinators and with the previous SLO coordinator to understand how to enter data into the current system and update the information. This was a process that took a significant amount of time given that there was no remaining documentation. Previous Respiratory Therapy Department records had historically been maintained on paper and due to retirements and change in facilities, the records were difficult to locate. The current Program Director, Peggy Wells, and the Director of Clinical Education, Rebecca Handley, have worked diligently over the last cycle implementing electronic systems that provide easy access by department members to important program and clinical information. All full-time faculty and administrative staff have access to TracDat, the S-Drive, and OneDrive where SLOs, course outlines, and important data are stored. According to the previous SLO coordinator all SLO's evaluated in the previous cycle met the required threshold.

3.1a CSLO Assessments and Modifications

The SLO process opens discussions and allows collaboration between all faculty to ensure that we are providing the needed education for our students. Health care is a dynamic field, and the respiratory therapy profession is in a period of transition and growth. Our goal is for each student to graduate and pass all required exams as quickly as possible after graduation in order to obtain employment. Course SLO's are listed in each syllabus and Program SLO's are posted in our classrooms, as well as being listed in each syllabus and in the RT Student Handbook.

The course SLOs were updated and tied to program outcomes in 2018. The Program Director, Peggy Wells, met with the previous Interim Dean of Allied Health and Nursing, Domenica Oliveri, to discuss how to update SLOs and tie SLOs to program outcomes. In 2018, the faculty met to discuss the importance of SLO's, discuss how to tie subject SLOs to course SLOs, and course SLOs to program outcomes. A comprehensive review was completed of every course and program SLO and course SLOs were revised as necessary. The PD provided guidance and training to the full-time faculty instructors regarding new processes for developing SLOs, tracking, documenting, and evaluating SLOs.

3.1b PSLO Assessments and Modifications

The Respiratory Therapy Program is a cohort program and attainment of Program Goals begins with the very first course. Each semester program SLO's are addressed in at least one course. Both full-time faculty members have weekly contact with all students throughout the program and the Director of Clinical Education makes visits to each adjunct clinical instructor class every semester to assure that we provide early intervention if a student needs remediation. The full-time faculty explain to students on several occasions within the New Cohort Orientation, during the first semester of the program, and as needed throughout the two years how these goals can be achieved using practical examples.

The Respiratory Therapy program has a very strict class attendance policy that is stated in each syllabus and in the program handbook. Lateness, leaving early, or failing to attend classes is considered unprofessional and places the student on an immediate remediation plan. The reason for this strict policy pertains to PSLO #3, "The student will demonstrate personal behaviors consistent with professional and employer expectations as a Respiratory Therapist". Employers in health care have strict attendance policies and many times personal behaviors are the most difficult to remediate. The CSLOs and policies within each course are tied to the PSLOs. The PSLOs have not changed since the last Program Review in 2015. These goals and expectations are set by the accrediting body for respiratory care schools, CoARC, and by the national, state, and regional professional organizations.

3.2 Trends and Implementation

A general trend that can be seen is that statistically students meet the benchmark or achieve a slightly higher outcome than the target set by the instructor. For example: The SLO for RESP 114 is for students to learn how to recommend appropriate drug, dose, and route of administration for a patient with cardiopulmonary disease. The assessment method is reviewing the percentage of students that can successfully answer two questions from the final exam about this topic. The target is that 75% of students will answer the questions correctly. The SLO assessment revealed that 80% of students answered correctly. Although specific items that are assessed are only sometimes achieved, the average scores for all questions assessed meets or surpasses the threshold.

The RT Program courses are rigorous in order to prepare students for board exams and SLOs are frequently reviewed by the Program Director and full-time faculty to make sure that SLOs are comparable to the desired program outcomes and to the types of questions students will be asked on board examinations. Instructors teach students exam strategies and regularly assess student performance. The frequent evaluation of performance within the courses in the RT Program is one of the reasons why students tend to achieve the benchmarks. Exams,

quizzes, and competencies are used to regularly assess student performance. Most of the SLO assessment methods for the courses within the RT Program look for students achieving a particular score on questions given during the final exams when students have had the opportunity to re-learn or evaluate their own performance and ask for assistance from classmates, teachers, and tutors.

When desired goals or outcomes are not achieved, the faculty examines the clarity of the statements, the wording of the SLO and how it applies to student learning, teaching pedagogy, and methods used to assess the student learning outcome. If an SLO or CSLO is not met, the Program Director and full-time faculty discuss the potential causes for why the SLO is not being met and how the course curriculum, teaching methods, and/or the assessment tools should be modified or changed. The plan for implementation of new teaching techniques and/or assessments is documented in writing and reviewed by the PD. The action plan is put in place and the course is modified. The CSLO is re-assessed the following year to see the measurable outcomes of the changes implemented. If the wording of the CSLO or the desired goal has changed, the CSLO is modified and followed up with the necessary documentation within the tracking system.

3.3. SLO Results

Currently, the RT Program is receiving the needed support and assistance for implementing revisions to assessment plans, making changes to curriculum, and improvements in processes, and improvements in technology. The Respiratory Therapy Department continues to hold high and achievable standards for student success.

3.4 Previous Changes to Assessment Cycles

The assessment cycle began in 2015. Since then, all courses in the RT Program have been assessed once or multiple times. The Program is in the process of reviewing and updating the timing of SLO assessments.

3.5 Current Assessment Cycles

Our department is in the process of updating our assessment schedule as the six-year cycle ends this year. SLOs for all courses in the RT Program have been assessed within the last six years. The cycle dates are listed in the spreadsheet below.

Course	Due Date	Column1		Course	Due Date	Column1
105	2022	Fall		220	2021	Spring
108	2022	Fall		268	2021	Spring
112	2023	Fall		114	2021	Fall
114	2021	Fall		220	2021	Spring
116	2022	Spring		108	2022	Fall
118	2022	Spring		116	2022	Spring
122	2023	Spring		118	2022	Spring
150	2023	Spring		105	2022	Fall
200	2023	Fall		150	2023	Spring
201	2023	Fall		112	2023	Fall
202	2023	Fall		122	2023	Spring
205	2024	Spring		201	2023	Fall
208	2026	Fall		200	2023	Fall
220	2021	Spring		202	2023	Fall
220	2021	Spring		205	2024	Spring
222	2026	Fall		232	2024	Spring
232	2024	Spring		208	2026	Fall
268	2021	Spring		222	2026	Fall

3.6 SLO Assessment Results & RT Program Goals

The Program Director reviews SLOs regularly and has a standing item on Department Meeting Minutes to provide updates and request tracking and evaluation of data during department meetings, including meetings with adjunct instructors. The full-time faculty members in the regular evaluation and documentation of SLOs. They are reviewed each semester by the full-time faculty who teach or oversee program courses to ensure accuracy, timeliness, and relevance to curriculum and curriculum updates. The current SLO coordinator, Felicia Kalker, reported in March 2021, “The Respiratory Therapy program is current with Course SLOs. You can see up to date assessments from last semester, and all assessments on all course SLOs, in the report attached [Appendix 4]. I believe that you are also current with Program-level outcomes.” The Respiratory Therapy Program Director, Director of Clinical Education, and full-time faculty members intend to have regularly scheduled, ongoing discussions for how to assess SLOs in a timely manner and make changes that accurately reflect student learning and outcomes for the RT Program.

SECTION 4 - FACILITIES AND SCHEDULING

PURPOSE OF SECTION 4.1 – 4.4: **To determine how departments utilize various campus services and the impact on student access (consider facilities, scheduling, campus resources and technology).**

4.1 Types of Facility Spaces

Lecture classes were given face-to-face in standard classrooms on campus in the Health Sciences building from 2010, when the building opened, until March 2020 when access to campus was restricted due to the pandemic. Some of the courses in the RT Program have laboratory sections that were offered face-to-face in the Health Sciences building until March 2020. Clinical course offerings are provided off-campus at local hospitals. Since the closure of campus in the Spring of 2020, there have been many changes to how instruction is provided, the use of campus facilities, and changes in clinical placements.

Possibly the greatest challenge for the department over the last year during the pandemic has been obtaining clinical placements for students in the hospital setting. In March 2020, most hospitals shut their doors to students to preserve personal protective equipment and limit the possibility for student exposure to Covid-19. The students were unable to practice essential skills due to hospital limitation and the closure of the Grossmont College campus where students practice skills in the lab. These were unforeseen circumstances, and the program was required to meet federal and state regulations and comply with hospital limitations. The faculty made efforts to find alternate ways to provide instruction while meeting CoARC accreditation standards.

CoARC made temporary provisions for students to practice skills in a remote environment using electronic or virtual simulations. However, per CoARC accreditation standards, starting in the Fall 2020 semester, students had to resume in person learning and perform live demonstrations of skills competencies in the laboratory to complete required training. Students completed virtual simulations online and met with instructors through synchronous Zoom sessions for the duration of the Spring 2020 semester. Due to the nature of the pandemic and the quickly increasing need for professionals in the field, the Dean of Allied Health and Nursing, Program Director, Directory of Clinical Education, and full-time faculty advocated for the return of the students to campus in the Fall 2020 semester to use the laboratory facilities to test student performance. CoARC standards required demonstration of competencies in the laboratory setting for students to continue and obtain an ASRT degree.

In the fall 2020, students were able to return to campus to complete laboratory training and demonstrate competency of skills. Hospitals started opening their doors to the return of students to participate in patient care. Currently, lecture courses are given online through the Canvas learning environment through asynchronous and synchronous learning. The synchronous class sessions are given through Zoom.

4.2 Facility Adequacy

Yes, the facilities and equipment adequately support student learning needs. Facility availability has improved since the opening of the new building in 2010 and the purchasing of equipment, such as new ventilators, and high-fidelity simulators. Respiratory Therapy has two

dedicated lab classrooms that are shared with other allied health and nursing courses. In the past if the time or day of a class needed to change from the previous year to it was difficult to get a classroom in the Health Science Building. Currently Health Science classes have priority for classrooms in the Health Science Building if the schedules and room requests are submitted by the requested due date. It is very difficult to find any room, especially in the Health Science Building, for meetings such as new cohort orientation or advisory meetings.

The Health Sciences Building has many excellent laboratory classrooms, two of which are complete with piped-in air and oxygen which is necessary to run ventilators and other equipment commonly used by RTs. Several of the laboratories have model patient care areas complete with hospital beds, lung simulators, high fidelity simulation manikins, ventilators, code carts, and other equipment used to monitor and care for patients in a hospital setting. Equipment purchases are ongoing per students' changing needs and for students to be able to practice setting up, operating, and troubleshooting equipment prior to doing treatments on patients. Simulation is used to provide interdisciplinary education and collaboration between students of the Allied Health Care Programs in multi-disciplinary activities as circumstances permit.

On multiple occasions, students have requested that the computer lab in building 34 be open later in the evening and on the weekends. The computers in the computer lab in building 34 have special software that the students use to practice clinical simulations in order to prepare for board exams. This software is not available at the Technology Resource Center. The request to maintain the computer lab open until later in the evening and possibly on Saturdays should be considered as these resources have demonstrated favorable and improved student scores on course and board examinations. See Appendix 5 for TMC and CSE NBRC published exam pass rates and outcome data.

The Respiratory Therapy Program is always changing and adapting to remain current with our community needs. Our Advisory Board is very active and recommends additions and changes to our curriculum. The National Board for Respiratory Therapy updates licensure exams every five years and publishes a document that lists the topics that should be included in curriculum in order to prepare students for taking board examination. The document is called the TMC Detailed Content Outlines. The RT Program uses the content of the outline to modify and update course curriculum to assure students are being taught the necessary information to be successful.

4.3 Facility Availability, Scheduling, and Improvements

Facility Availability and Scheduling

Respiratory Therapy attempts to schedule regular course offerings as far in advance as possible. The instructors used a variety of lecture classrooms in the Health Sciences Building to teach in-person courses. The space was adequate on many occasions. Doing team-based learning assignments in smaller lecture classrooms can make it difficult for students to move around in the room. However, since March 2020, lecture courses are given online through the Canvas learning environment through asynchronous and synchronous learning. The synchronous class sessions are given through Zoom.

The lab technicians and Dean actively support the scheduling of Respiratory Therapy

laboratory courses in the two laboratories that have piped-in oxygen and respiratory equipment. RT laboratory courses are given priority scheduling in these two classrooms on campus.

Respiratory Therapy students attend clinical courses at local hospitals one day per week throughout the duration of a semester. To meet clinical offerings, adjunct faculty scheduling needs, and hospital requirements, students sometimes attend clinical courses two days per week for part of the semester. All other courses must be scheduled on the remaining three days of the week. Having three full-time instructors while hiring many adjunct instructors to cover required courses in the major forces the department to change course day and time offerings from year to year. When lecture and laboratory courses are offered on-campus, this makes scheduling of courses in Instructional Operations difficult. Since lecture courses have been offered online over the course of the last year, scheduling courses with Instructional Operations has not been necessary. However, learning how to manage the online learning environment for students has taken a significant amount of time for the instructors.

Since laboratory courses resumed in-person learning on-campus in the lab, this has brought its own difficulties:

- Limitation of classroom size because of social distancing has increased the need for additional equipment, increased the burden of workload on instructors, for example, planning and reorganizing assignments and setup to meet student needs, increased the amount of laboratory sections per course, and increased the need for tutoring assistance as instructors are live streaming from one classroom to the other and it can be difficult for students to see how equipment is operated through video.
- The laboratory technicians provide much needed support and have had limited access to campus.
- Cleaning and disinfecting take students and instructors time and effort.
- Sufficient time must be allowed between laboratory sections for cleaning and disinfection. This time has lessened since the instructors and tutors have been allowed to assist with disinfecting classroom spaces and equipment.
- Commute time has been a stressful aspect for students and instructors. When scheduling classes, it has been necessary to allow sufficient time between online synchronous lecture sessions and on-campus laboratory courses or off-campus clinical courses. When teaching in a hybrid manner where lecture courses are given online through ERT or Zoom sessions and laboratory and clinical courses are taught face-to-face is the need to have adequate access to technology and Wi-fi off-campus and arrive to campus or a hospital within a specific amount of time. The RT Program is the only non-proprietary school in the San Diego and Imperial Counties. Students drive long distances to come to class. For example, in the current student cohorts, several students drive to campus from Temecula, others come across the border to study, others drive from Encinitas or Carlsbad, and commute time must be accounted for when scheduling classes. We have needed to allow at least one and a half hours between the end of online lecture courses and the start time of on-campus laboratory or off-campus clinical courses to allow sufficient commute time.
- Hybrid online lectures with on-campus laboratory sections has also created a need to schedule exams for ARC students at times other than the regular class schedule. When students are allowed time and a half or double time to take an exam, instructors are cautious to make sure students are given the required accommodations by law. If

students have a proctored online lecture exam for which they need adequate technology, Wi-fi, and a quiet space, they most often are choosing to take the exam at home. If they are to commute to a laboratory or clinical course, it creates additional stress for the student when completing the exam. Instructors have made every possible effort to be flexible, prevent overlapping scheduling, and reduce student stressors.

Improvements and Efforts to Meet Student Needs

In the Fall 2020 semester, students returned to campus with face coverings, practicing social distancing, and taking extensive measures to ensure their own safety, protect their classmates, staff, and faculty from being exposed to Covid-19. Protocols for cleaning, sanitizing, and disinfecting equipment and classrooms were implemented. The program faculty and students are immensely grateful for the provisions that were made by many for our students to be able to return to campus, especially the Division Dean, Nancy Saks, the college leadership and Administrative team, and the lab technician staff, Pat Murray and Dan Lopez.

The full-time faculty members worked hard and made exceptional efforts to collaborate and coordinate the return of students to campus. The Director of Clinical Education and the program faculty, including many of the adjunct faculty, changed their schedules and maintained flexibility to adapt to rapidly changing student needs and clinical placements. Assessing student competencies within the laboratory setting has been instrumental in the continuance of timely graduation of the students in the RT Program throughout the pandemic.

Instructors worked diligently to complete ERT and DE training, create online learning assignments, learn how to hold Zoom synchronous meetings and classroom session and figure out ways to have students actively participate during online learning sessions. Most lecture and lab courses have been taught by the full-time faculty members.

Through continued communication and collaboration amongst our Division leadership, the RT Department leadership, the hospital leadership, and the San Diego Consortium, students were able to resume their clinical placements at most of the local hospitals in the Spring 2021 semester. Critical training on the use of equipment and skills competencies are currently held in the laboratory on campus. Lecture courses continue to be given through synchronously and asynchronously education using the Canvas online learning environment.

4.4 Technology and Equipment Needs

The computers at the instructor stations are slow. For example, when using the computer in room 34-211 or 34-212, it can take 5-10 minutes for the computer to boot or turn on, open a web browser, open the Canvas learning environment where PowerPoints, images, and videos are stored. In addition to opening Canvas, live streaming from one classroom to the next has been necessary prior to starting class when only a limited number of students can be in one classroom at a time. It can take an additional 10-20 minutes to login to a Zoom session and activate the audio for the live streaming from one classroom to another for students to follow the instructor-led hands-on portion of the lab. In part, this is because the computers are older models. Sometimes the time it takes to start a computer in the classroom is because of the Wi-fi being slow. Instructors have brought their own laptops to class to shorten the setup time for live streaming. The computers in the labs do not have a built-in webcam or microphone. Streaming from one class to the other requires both a webcam and microphone. The use of

personal laptops with a microphone and webcam simplifies the process of streaming. Additionally, the image that the older model computer that is stationary and available in room 34-211 gives a blurred image when using a projector.

Emergency Remote Training has had challenges of its own. Students and instructors frequently encounter issues with Zoom, with poor Wi-fi connections, issues when logging into exams or quizzes, the need for increased training and understanding of how to use technology which particularly effects some of the older students. It is also costly for students to need to purchase expensive equipment, computers, and Wi-fi services for them to complete their education.

Another aspect of teaching in a hybrid manner where lecture courses are given online through ERT or Zoom sessions and laboratory and clinical courses are taught face-to-face is the need to have adequate access to technology and Wi-fi off-campus and arrive to campus or a hospital within a specific amount of time. The RT Program is the only non-proprietary school in the San Diego and Imperial Counties. Students drive long distances to come to class. For example, in the current first year cohort, several students drive to campus from Temecula, others come across the border to study, others drive down from Encinitas or Carlsbad, and commute time must be accounted for when scheduling classes. We have needed to allow at least one and a half hours between the end of online lecture courses and the start time of on-campus laboratory or off-campus clinical courses.

PURPOSE OF SECTION 4.5: **To have departments determine, based on their review of waitlist data and student feedback, if their program could serve more students if it had more facility resources available and/or used them differently.**

4.5 RT Program Recruitment, Facility Availability & Access

Yes, the inability to be on campus has impacted the ability for the RT department to continue certain promotional efforts.

Prior to the closure of campus, the PD, DCE, and full-time faculty attended Biology, Chemistry, Anatomy, Physiology, and Microbiology classes at Grossmont and Cuyamaca Colleges to promote the RT Program. Presentations and tours were also arranged for high school students through HASPI (Health and Science Pipeline Initiative). The Program Director attended community events, health fairs, and career days in the community to advertise the respiratory therapy program. Full-time faculty and students were required to volunteer for community organizations and participate in College Health and Career Fairs. New brochures, posters, and information for Griffin Gate TV were developed and are currently being used to promote the program. Lawn signs were developed and placed around campus for students to view. Most of these efforts have been difficult to achieve since the campus closure.

The Program Director and full-time faculty hold virtual monthly program previews at various times of the day to interest students in respiratory therapy. Students have created videos in the lab that have been uploaded to YouTube to continue promoting the program. The faculty are in the process of discovering and planning new ways to promote the program in an online learning environment, such as having students and instructors collaborate in making a video

that can be sent to Biology, Chemistry, Anatomy, Physiology, and Microbiology classes at Grossmont and Cuyamaca Colleges to post in the Canvas learning environment.

During the Covid-19 pandemic and remote teaching circumstances, students have not had access to campus and many students have reported difficulties concentrating due to increased distractions and noises at home and because of technology issues, such as lack of broadband and Wi-Fi signals. Access to local hospitals has also limited the quantity of students that are able to participate in clinical each semester. We have gained a few more clinical sites such as Scripps La Jolla and UCSD. The only challenge we have encountered is the loss of students being able to participate in clinical rotations at Rady Children's Hospital San Diego due to hospital restrictions on allowing students to enter the facility during the pandemic. Since obtaining the stipend, we have more respiratory therapists interested in becoming clinical instructors for our program. This enables our students to participate in rotations at different clinical facilities and obtain a wide array of experience in different types of locations and hospital units where diverse patient populations are cared for that require different levels of expertise to teach.

4.6 Office Space, Storage, Tutoring & Open Workspaces for Students

Based on a review of our 6-year Unit Plan the Respiratory Therapy Department has increased the tutoring services available to students. Previous tutoring services were limited to courses with labs and only during the designated lab times. Many of our special population students have very demanding schedules outside of regular class schedules and allowing for flexible tutoring hours increases the opportunity to utilize the service. Students are now able to schedule appointments with tutors with instructor permission. Instructor permission is only required to ensure tutor hours are being used wisely and that equal access is assured.

SECTION 5 - STUDENT EQUITY AND SUCCESS

PURPOSE OF SECTION 5:

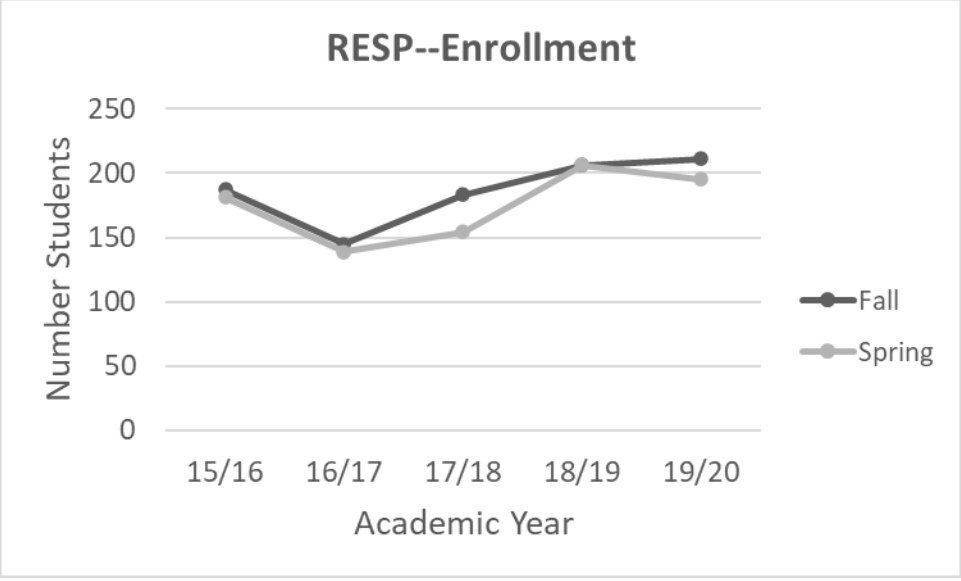
- **To determine if student enrollment in your program is robust and if students are enrolling in your program in equal representation to the general Grossmont student population.**
- **To have the department examine student success and retention overall for your department and disaggregated by ethnicity, age, gender.**
- **To have departments explain what they have done to improve success for all students while maintaining academic rigor.**

NOTE: See Appendix 2 for enrollment data; Appendix 3 for student success data.

5.1 Enrollment Data

What are the identifiable patterns with regards to overall trends in enrollments in your department? Explain what is causing these trends (e.g. campus conditions, department practices). Once you have identified and explained your enrollment patterns, then address what your department has done/is doing to address identified issues. Examples of any changes you made to manage enrollment are encouraged.

In addition, you should examine your enrollment data, disaggregated by gender, age and ethnicity. For any of these student groups in your department with enrollment data at lower or higher proportions than college-wide numbers, describe what factors you think is causing these patterns [Data and a summary of notable patterns will be provided by the Program Review Data Liaison].



Ethnicity by Term - Count of Students

Term Desc	Fall 2018		Fall 2019		Fall 2020	
Ethnicity (9)	Students	% of Total	Students	% of Total	Students	% of Total
African American/Black	1	1.82%	3	5.00%	5	8.20%
American Indian/Alaskan Native	1	1.82%	2	3.33%	2	3.28%
Asian	7	12.73%	6	10.00%	7	11.48%
Hispanic/Latino	16	29.09%	19	31.67%	28	45.90%
Middle Eastern			1	1.67%	1	1.64%
Other/Unknown	1	1.82%			1	1.64%
Two or more	5	9.09%	5	8.33%		
White	24	43.64%	24	40.00%	17	27.87%
Total	**55**	**100.00%**	**60**	**100.00%**	**61**	**100.00%**

Gender by Term - Count of Students

Term Desc	Fall 2018		Fall 2019		Fall 2020	
Gender Desc	Students	% of Total	Students	% of Total	Students	% of Total
Female	35	63.64%	35	58.33%	40	65.57%
Male	20	36.36%	25	41.67%	21	34.43%
Total	**55**	**100.00%**	**60**	**100.00%**	**61**	**100.00%**

Age Band by Term - Count of Students

Term Desc	Fall 2018		Fall 2019		Fall 2020	
Student Age at Snapshot - Band4	Students	% of Total	Students	% of Total	Students	% of Total
21-24	13	23.64%	15	25.00%	13	21.31%
25-29	16	29.09%	15	25.00%	18	29.51%
30-39	19	34.55%	20	33.33%	21	34.43%
40+	7	12.73%	10	16.67%	9	14.75%
Total	**55**	**100.00%**	**60**	**100.00%**	**61**	**100.00%**

The Respiratory Therapy Department is required to track enrollment and retention rates for accreditation. A sample of our department tracking reports is included at the end of this section. The respiratory therapy program defines retention as the number of students that complete a course, a semester, or the entire sequence of courses with a grade of “C” or better. Program retention is reported to our accreditation body yearly. Course and semester retention are tracked each semester, each year, and for the cohort. The information is important to identify barriers to success and to provide additional resources for a class if needed. The district defines retention as the percent of students earning any grade but a “W” in a course or series of courses. Because we are a cohort program and many courses have co-requisites students rarely drop a course, choosing instead to remain in the program and complete other courses with a passing grade.

The Respiratory Therapy Department has an upward trend in enrollment which is somewhat opposite to the trend in recent years at Grossmont College. In 2016-2017, the program had a small cohort of students because acceptance into the program is based on two main influencing factors: Job placement in the community upon graduation, and availability of clinical sites for students to complete necessary clinical hours to graduate. Since then, enrollment

rates have grown because UCSD and Kaiser Permanente opened new hospital locations in San Diego, and job placement of our graduates increased as a result. Since 2017, externship and student volunteer opportunities increased for students at Rady Children's Hospital San Diego, UCSD Sleep Lab, and continued to be favorable at Kaiser Permanente and UCSD NICU.

The district data demonstrates only one drop below 90% in the Success and Retention information. Success and retention in all age groups and ethnic groups appear consistent with the enrollment. The one exception is the data for Spring 2017, when success and retention rates for all age and ethnic groups were lower than in previous years. Reviewing information for this semester indicates that the course was co-taught by two instructors who had not previously taught the course and whose teaching styles varied greatly from one person to the other. The Program Director and full-time faculty worked to address the changes and to update the curriculum and format of the class to be consistent with the teaching methodology for other courses within the RT Program. Department discussions were held to address this issue and suggestions made on ways to support student success and keep the quality of the courses and program high. The class has since been taught by one full-time faculty member, Carey Flores, who has updated the textbook and curriculum and teaches the classroom in an engaging manner. We were praised by one of the local managers for the improvements as these have led to exemplary performance by our recent graduates.

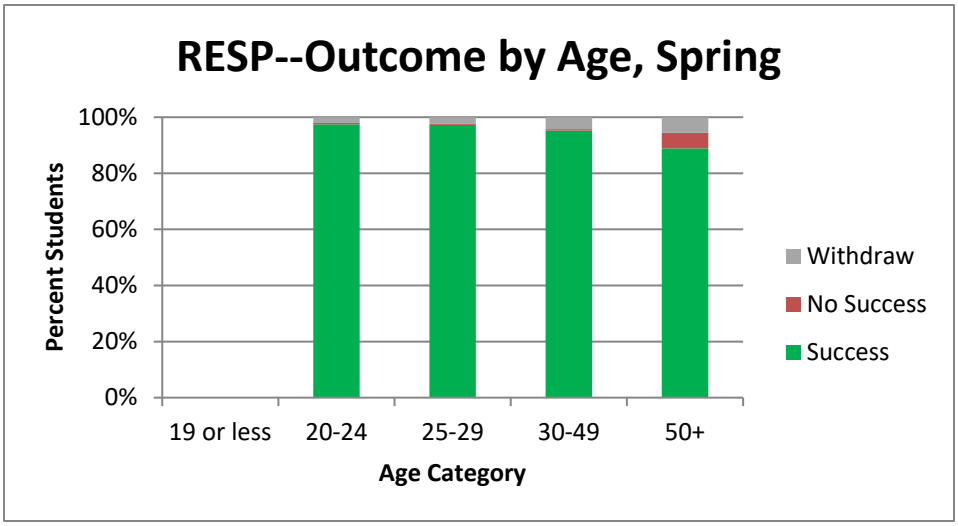
Dear Peggy,

I am writing to thank you and Grossmont College for your support of Respiratory Therapy education, especially the neonatal / pediatric component. As the Technical Director of the Respiratory Care Department for the Level 3, Regional NICU at UC San Diego Health, I have found your graduates to be far better prepared for the workplace than graduates of other local programs. I do not generally hire new grads from other programs but am fortunate to have hired many from Grossmont College with great success. The Grossmont College graduates have received both didactic and hands on education that makes them wonderful respiratory care practitioners. The success of your students contributes to the good outcomes of our patients.

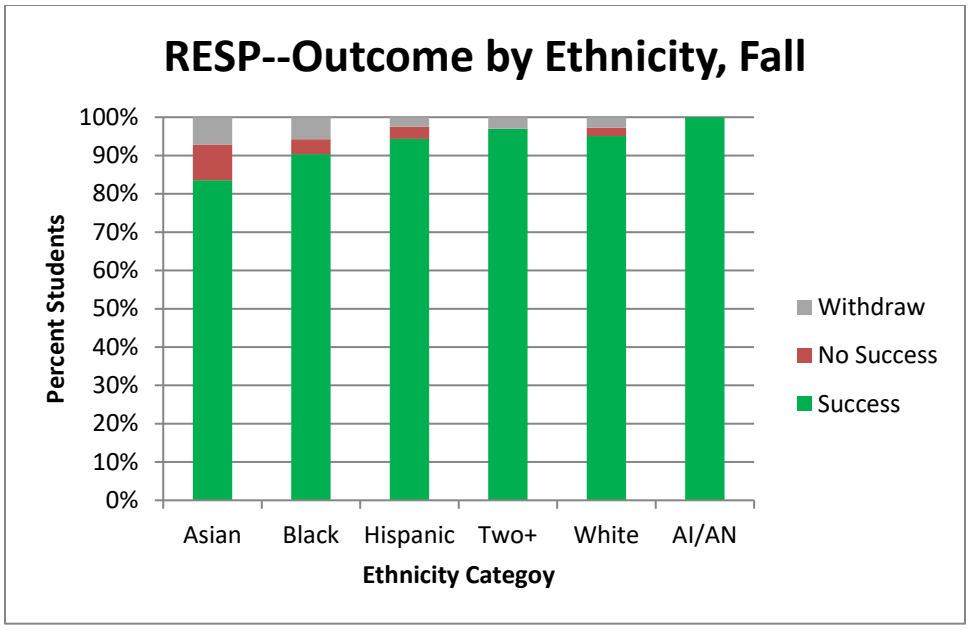
Thank you,

Jim Goodmar RRT-NPS, RPFT
Technical Director
UC San Diego Health

The Respiratory Therapy Department is permitted to admit up to 45 students in each cohort. A new cohort is admitted each Fall. The number of students admitted into each cohort is determined in collaboration with the Dean, faculty, our advisory board, and the job placement rate of current graduates.



Based on statistics provided for the years 2018 – 2020, the Respiratory Therapy student cohorts have more female than male students. This is commonly seen in Allied Health and Nursing professions. Most students are in the 30 – 39 age group, with the 25 – 29 and 20-24 age groups represented close behind one another consistently throughout the time period. We have a small number of students in the 40+ age group enroll in the Respiratory Therapy Program each year. Students in the Respiratory Therapy Program are frequently in the 30 – 49 age group and many are working adults seeking a profession. The 25 – 29 age groups are the second most represented group. This group is made up of students with degrees in other disciplines looking for a profession or working students completing the prerequisites as part time students. The third age group to be represented is the 20 – 24 age group, with very few over age 40+ students. Because we have few students in this age group category, the sample size is small and can quickly skew the percentage of success or retention in the data charts. It is fairly common in our department to hear from students that they are changing careers or that they obtained a bachelor's degree in a different field, and are wanting a change in the type of job they hold or the amount of direct patient care they provide. For example, paramedics report wanting higher earnings, and nursing assistants report wanting to perform a higher level of care than obtaining vital signs and basic assessments to patients.



The Respiratory Therapy Program has always been a very diverse program. Females have traditionally outnumbered males, and although white students constituted a majority in the past, beginning in 2013 the diversity of the program increased with varying ratios for student ethnicities. Our ethnic diversity within the program has changed and includes a larger Hispanic population (around 29-45% compared to prior stats of 17-20%), lower African American or black population (2-8% compared to 4-17%), and similar amount of Asian and Native American populations and whites. This data reflects current research on the changes in the population within the San Diego Area and should be compared to the college/ district. We have minimal enrollment from American Indian/Alaskan Natives ethnic groups and the amount of Middle Eastern students has grown over the last 5 years, however, this data is not reflected in the chart.

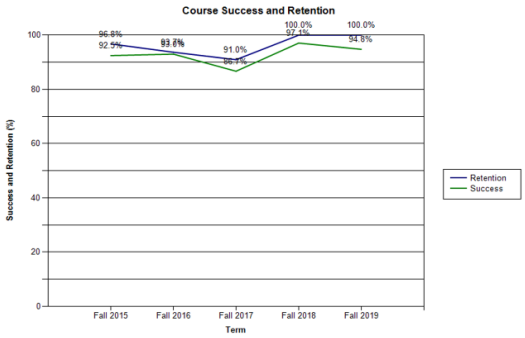
Hispanic and white students enroll in greater numbers than other ethnic classes, and in recent years there has been an increase in the amount of middle eastern students in the program although this ethnic reporting does not appear in the data chart. The state application for students registering to community colleges had fewer ethnic categories available for selection prior to 2018. Thus, the Program Review Data Liaison, Bonnie Ripley, gave an example and explained that students could have selected a category such as white if they were middle eastern instead of the current category which allows them to choose such a selection. It appears that African American students enroll in the RT Program at a similar rate to the college's proportion of this ethnicity and that Pacific Islanders and Native American also enroll at a similar rate seen at the college level. Because we have serve few Native American students, the sample size is small and can quickly skew the percentage of success or retention in the data charts.

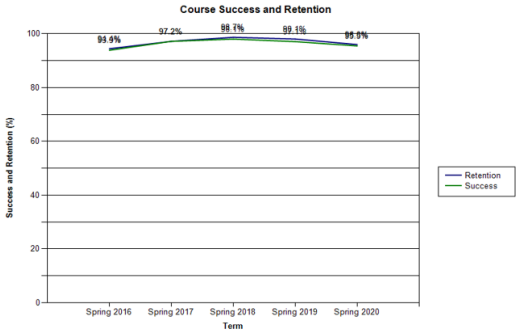
5.2 Student Success and Retention

Discuss trends in student success and retention overall in your department and explain these trends (e.g. campus conditions, department practices). Also examine the success and retention data disaggregated by gender, age and ethnicity. For any groups that have success rates in your department at lower or higher than college-wide describe

what factors you think cause those patterns. Provide examples of any changes you made to improve student success/retention, especially for groups that have equity gaps. [Data and a summary of notable patterns will be provided by the Program Review Data Liaison]

Overall success in the Respiratory Therapy Program is high with success rates consistently above 90% for all age and ethnic groups that is far above the college average and target for these measures.





We attribute these findings to the difficulty pre-requisite courses and application process that the students must go through prior to entering the program.

The Respiratory Therapy Program faculty monitor student success by using a remediation plan. Students can trigger the remediation plans by receiving a score of 76% or below on an exam, failing quizzes, failing to turn in assignments, or for personal behaviors such as arriving late to class, leaving early, and unprofessional behavior. The remediation plan is a contract between the student and instructor. Full-time instructors assist adjunct instructors with the remediation plan. The purpose of the plan is to help the student succeed. Together the student and the instructor identify areas of weakness, possible reasons for the problems, and a plan to rectify the problem. If the remediation is for a low exam score the instructor goes over the entire exam with the student to identify any areas that may need further instruction.

Individualized instruction provided during remediation and tutoring allows us to provide resources for students with food insecurities, financial issues, recommendations for those who work full-time and students who struggle with critical thinking questions. Our program has tutors that are knowledgeable in the curriculum and content of the Respiratory Therapy courses and who are familiar with the use and operation of equipment that respiratory therapists use in the field. All tutors are graduates of the program and familiar with our lab process. Interested graduates with the minimum qualifications are given an orientation by the Program Director. Discussions include information on the transition from student to tutor, and role of the tutor. The PD regularly drops into the open labs to observe and assist the tutor and observe the tutor/student interaction.

The table below is an example of the respiratory therapy department tracking records:

Mandatory Remediation Referral: Academic
Date:_____
Student: _____ Referring Faculty: _____
Course:_____
Reason for Referral:
☐ Exam score < 75%
☐ Other_____

Course Content Action Plan developed in collaboration with course faculty:

Actions	Date to be completed	Faculty initial/date completed	Student initial/date completed
☐ Individual reviewed exam with course instructor			
☐ Attendance at group tutoring session			
☐ Review questions assigned:			
☐ Other:			

☐ Student is currently on Active Remediation Plan – see previous form

Problems identified
1.
2.
3.
4.
General Action Plan

Action	Date to be completed		Student initial/date completed

☐ Mandatory Remediation plan has been completed with all required signatures.

Orientation for new cohorts was revised from two hours to four hours in 2015, and included speakers from ARC, Financial Aid, Evaluations, Veterans Affairs, and Counseling. Students completed a survey aimed at identifying barriers to completion of the program, and the Program Director follows-up with each student individually to identify barriers to learning and make recommendations for success in the program. The program director and director of clinical education continuously emphasize the intensity and time commitment needed for the program. The schedule is described in detail and students were repeatedly reminded that it is very difficult to work full-time and complete the program.

Students are placed on the Respiratory Therapy Program waitlist upon completion of an application and all prerequisite courses. All prerequisites must have been completed within the

last seven years however this not a requirement for general education courses. Many of our students complete only one course a semester before entering the program and are not prepared for the tremendous amount of work required of the full-time respiratory therapy student.

Math and reading skills are another barrier to success in the respiratory therapy program. The new cohort is given a math quiz developed in collaboration with Shirley Pereira from the Math Department. After completion of the math quiz students are given a copy of the math quiz and the answers and instructed to review math skills or seek assistance with these skills during the summer before entering the program.

The Program Director and Director of Clinical Education are confident that the longer orientation, faculty mentoring, student surveys and math quiz before beginning the program will increase our success and retention rates.

5.3 Student Engagement Efforts

Describe specific examples of departmental or individual efforts, including instructional innovations and/or special projects, aimed at encouraging students to become actively engaged in the learning process in their classes.

The full-time faculty use a team-based learning approach because we value engagement, retention, and success of our students. The general format for most of the class in the RT Program is through team-based learning or flipped classroom. Team-based learning and flipped classroom models are when the student utilizes individual study time to read the textbook, look up important concepts as directed by the instructor, and watch instructional videos and lectures prior to coming to class. During group classroom time, each student is expected to participate in dynamic and engaging learning opportunities with others to promote critical thinking skills and the application of the knowledge learned. Teams discuss questions and case studies of simulated patients with cardiopulmonary diseases to determine how to assess and treat patients. The goal is promoting engagement and critical thinking, and to give students the opportunity to practice communicating effectively and collaborating in a professional manner with one another as the knowledge, skills, and professional behaviors are essential for providing safe patient care in a future hospital setting.

Students are provided a variety of learning resources in Canvas prior to coming to class, such as videos, recorded lessons by the instructor, medical journal articles, and PowerPoint presentations. They are asked to submit weekly assignments, work with other students completing discussion boards, research papers, and case studies. When students come to class, whether in person or through synchronous Zoom session during the pandemic, students are asked to work in groups discussing how to best care for simulated patients using questions and case studies or within a high-fidelity simulation laboratory. Quiz questions are given on a weekly or bi-weekly basis at the start of class for most courses in the RT Program.

During class time, students work in small groups of 3-6 students to answer questions about case studies of patients with cardiopulmonary diseases, identifying signs and symptoms, learning medical terminology, and discussing with their classmates which interventions are the most appropriate when caring for the patient. They are then asked to discuss and debate in a

respectful way their thoughts and opinions and provide references for the information they find. They are assigned in-class individual and group presentations in most classes within the program apart from laboratory sections of class. Students write research papers in groups for several of the courses in the RT Program, such as RESP 105, RESP 150, and RESP 205. They also write journal entries in other courses, such as RESP 201 in which they are required to submit approximately 10 journal entries reflecting on the course material. In the last semester students present a final project and first year students as well as community members, advisory committee members, and local hospital managers are invited to view the presentations.

The RT Program utilizes current technology, including the purchase of new microprocessor ventilators in 2021. At the beginning of laboratory sessions, the instructor gives a brief overview of the key concepts of the weekly lessons and instructs students on how to complete the guided laboratory assignments. Over the past six years, the students have increasingly been asked to use the high-fidelity simulators to demonstrate their ability to competently perform clinical skills, for example, placing a “patient” on a non-rebreathing mask that provides oxygen and hooking it up to the appropriate compressed gas source with a manufacturer recommended flow settings. Students use Training Test Lungs weekly in the courses in which they learn mechanical ventilation to learn how to care for patients who have diseased lungs. The I-clicker was introduced in 2012 and is used in several of the classes when students are on campus. The I-clicker identifies areas of instruction that may need remediation and can be used anonymously to avoid student embarrassment or unease about asking a question.

The RT Program has added electronic simulations and modules which are called *Classmate Simulations* and *C & S Solutions.* These are designed for students to have the ability to practice caring for simulated patients with common cardiopulmonary pathologies in a format that resembles the clinical simulations on the board CSE examination. Student's scores have increased exponentially on the CSE since the implementation of these electronic resources.

Students are required to participate in volunteer activities. Participation in community events is encouraged to build connections with the community. The Respiratory Therapy Program has maintained a tight bond with the American Lung Association. Students participate in fund raising and community educational events as volunteers.

5.4 Interdisciplinary Collaboration

Explain how the program incorporates opportunities for student engagement outside of class time and/or in collaboration with other departments (e.g. interdisciplinary course offerings, learning communities, internships, research projects, service learning, or participation in community events, tournaments, competitions, and fairs) to enhance student learning.

Our full-time faculty and other educators and leaders of the Allied Health and Nursing Professions at Grossmont College received the *Innovators of the Year* award in 2018 for leading the way in creating multidisciplinary events.

Examples of teaching methodology and collaboration amongst our faculty include:

- Code Blue Day, in which nursing, respiratory therapy, and occupational therapy assistant students practice inter-disciplinary care of patients in cardiac and respiratory arrest in a simulated ICU setting.
- Oxygen Therapy and Safety, when respiratory therapy students prepare learning activities for occupational therapy students on oxygen therapy and safety.
- Pediatric simulations when nursing and RT students care for babies and children collaboratively through simulation in the high-fidelity simulation laboratory.
- Airway and Ventilation, where respiratory therapy students prepare learning activities for nursing students on airway management and ventilation.
- Cardiovascular Testing and Transport of Critically Ill Patients, in which Cardiovascular students prepare learning activities for respiratory therapy students. Respiratory therapy students instruct cardiovascular students in transportation of critically ill patients requiring mechanical ventilation.

Respiratory Therapy collaborates with other allied health and nursing department in simulations and reciprocal teaching. Students and instructors from different departments are invited to be guest experts and provide instruction to other programs on topics important to both disciplines. The Respiratory Therapy Department participates in multi-disciplinary learning opportunities with nursing, cardio-vascular technology, and occupational therapy assistant programs. The students are also very active in on-campus health fairs, and other ASGC student activities. The Program Director is on the advisory board for Lung Force, a community event sponsored by the American Lung Association to provide education to patients and health professionals. Students along with the Program Director volunteer at the event. Respiratory Therapy students form ASGC clubs and are active in Grossmont College career and health fairs.

The departments in the Allied Health and Nursing Division are very supportive of each other. The programs collaborate and share best practices for syllabi, handbooks, and delivery methods. The Dean supports continued education for all full-time and adjunct instructors. The departments within the division collaborate in learning activities. RTs work under the direction of a physician and within a healthcare team alongside other clinicians, such as nurses, and various members of the allied health professions. As members of a team, educating students to become effectively communicate and collaborate with others is vital to patient safety. The full-time faculty use a team-based learning approach because we value engagement, retention, and success of our students.

5.5 Registry Examinations Data & Trends

If state or federal licensing/registration examinations govern the program, please provide data and comment on student success trends.

The continued success of our graduates is evident in yearly statistics collected from CoARC. Grossmont College respiratory therapy graduates pass the Certified Respiratory Therapist

(CRT) exam and the Registered Respiratory Therapy (RRT) exam at a higher rate than the proprietary programs in San Diego County.

The RT Program at Grossmont College continues to graduate students who pass board exams with high scores. After successful completion of the program and obtaining an ASRT degree, students must pass the Therapist Multiple Choice (TMC) exam at a high cut score to take the Clinical Simulation Examination (CSE). Students who pass both the TMC and CSE obtain credentials as a Certified Respiratory Therapist (CRT) and a Registered Respiratory Therapist (RRT) become eligible to apply for licensure to work in the state of California. Although we have yet to see the outcomes and success rates for students who completed lecture courses through Emergency Remote Training, Distance Education, and minimal hours in the laboratory, we remain hopeful as student scores on board exams have continued to improve. The continued success of our graduates is evident in yearly statistics collected from CoARC.

3 Year Average Success Rates for Respiratory Therapy Exams 2012-2014

	CRT	RRT
Grossmont Community College	93.4%	71.4%
Concorde Career College	78.2%	38.8%
California College San Diego	78.3%	36.8%
Pima Medical Institute – Chula Vista	84.3%	60.7%
United States National Average		

3 Year Average Success Rates for Respiratory Therapy Exams 2016-2018

	CRT	RRT
Grossmont Community College	100%	95%
Concorde Career College	-	-
California College San Diego	-	-
Pima Medical Institute – Chula Vista	93%	84%
United States National Average	93%	80%

(http://www.coarc.com)

CoARC's Programmatic Outcomes Data

	Retention Threshold 70% National Average 92%	Job Placement National Average 88%	CRT Success Threshold 80%	RRT Success National Average 80%
Grossmont College	91%	86%	100%	95%
PIMA San Marcos	86%	79%	93%	84%
California College San Diego	99%	62%	75%	62%

Retrieved 12/29/20 from: https://www.coarc.com/getattachment/Students/Programmatic-Outcome-Data/2019-RCS-Program-Outcomes-(1).pdf.aspx?lang=en-US

The pass rates on board examinations as averaged by the National Board for Respiratory that administers the exams demonstrates that there has been a steady improvement in student scores since the new exams with a change in content and format were administered starting in 2015. These scores can be seen in Appendix 6.

5.6 Degrees & Certificates

If your program offers a degree or certificate in the college catalog, explain the trends regarding number of students who earn these degrees and/or certificates, including any changes that you have made to increase awards. Insert the "Degrees and Certificates" data table in this section.
[This data table will be provided to you by the Program Review Data Research Liaison.]

Department	Award		14/15	15/16	16/17	17/18	18/19	19/20	Total
Cardiovascular Technology	Cardiovascular Technology	AS	27	36	28	35	34	29	189
	Telemetry/ECG Technician	COA	26	0	0	11	12	17	66
Nursing	Nursing	AS	67	61	58	67	66	36	355
Occupational Therapy Assistant	Occupational Therapy Assistant	AS	22	19	21	21	20	22	125
Orthopedic Technology	Orthopedic Technology	AS	12	6	7	15	9	8	57
	Orthopedic Technology	COA	17	17	7	18	15	11	85
Respiratory Therapy	Respiratory Therapy	AS	22	27	15	22	19	28	133
	Anesthesia Technology	COA	0	0	0	0	0	0	0
AHN Division Totals	Associates		150	149	129	160	148		736
	Certificates		43	17	7	29	27		123
College Totals	Associates		1865	1972	2214	2609	2761		11421
	Certificates		1269	1198	1362	1492	1605		6926

The number of degrees awarded are directly related to the number of students in any given cohort. Cohort numbers are determined by availability of clinical sites and the percentage of graduates that gain employment in previous years. Many years ago, the respiratory therapy department accepted 45 students. At that time, there were no limitations on the number of students that could be in a clinical area. Currently, hospitals and our accreditation body limit the number of students in each clinical area. As a result, we had to decrease the number of students accepted into each cohort.

5.7 Job Placement, Salary, & Graduate Success

If you have any information on what students who major in your department go on to achieve after they leave Grossmont, please share that with us. For example, where do they transfer and do they graduate on time? What careers do they pursue? What are starting salaries in the field? Do you know if they go on to employment in their field and professional success? What impact did Grossmont have on their lives?

The US Bureau of Labor and Statistics projects employment of respiratory therapists in the United States to grow 19 percent from 2019 to 2029 which is must faster than average for most jobs. This number may exponentially grow as the need for essential healthcare workers has increased due to the Covid-19 pandemic. Growth in the middle-aged and elderly population will lead to an increased incidence of respiratory conditions such as Chronic Obstructive Pulmonary Disease and pneumonia.

Job placement for graduates has increased significantly since the prior program review report. Two of the three proprietary schools in San Diego County have closed in the last two years. The faculty has obtained a greater number of opportunities for students to participate in work externships. As a result, many students have obtained jobs at local hospitals. Several hospitals have opened new facilities, such as Kaiser Permanente and University of California San Diego. The job placement rate for Grossmont College Respiratory Therapy graduates in San Diego was below 70% in 2011. The job placement rate for the 2014 Respiratory Therapy

graduates was 75.8%. It is currently at 86% as two students from the graduating class of 2020 have not yet obtained employment. Because the cohort size is a small sample size, a small quantity of students who graduate and do gain employment affect the class averages greatly. The outlook for the graduates of 2021 appears brighter as hiring managers indicate they will need additional respiratory therapists and job opportunities are opening even prior to graduation for students.

	2019	2018	2017	2016	2015	2014	2013	2012	Threshold	Current Period 3 year average 2019-2017	Previous Period 3 year average 2018-2016
Retention	86%	88%	89%	100%	80%	100%	80%	88%	70%	87%	91%
Job Placement	100%	90%	88%	81%	86%	93%	84%	10%	0 %	93%	86%
RRT Credentialing Success	100%	95%	94%	96%	91%	97%	74%	74%	0 %	96%	95%
TMC High Cut Score Pass Rate	100%	95%	100%	96%	N/A	N/A	N/A	N/A	60 %	98%	97%
Overall Employer Satisfaction	100%	100%	100%	90%	100%	N/A	100%	100%	80 %	100%	97%
Overall Graduate Satisfaction	100%	100%	100%	N/A	100%	112%	100%	100%	80 %	100%	100%

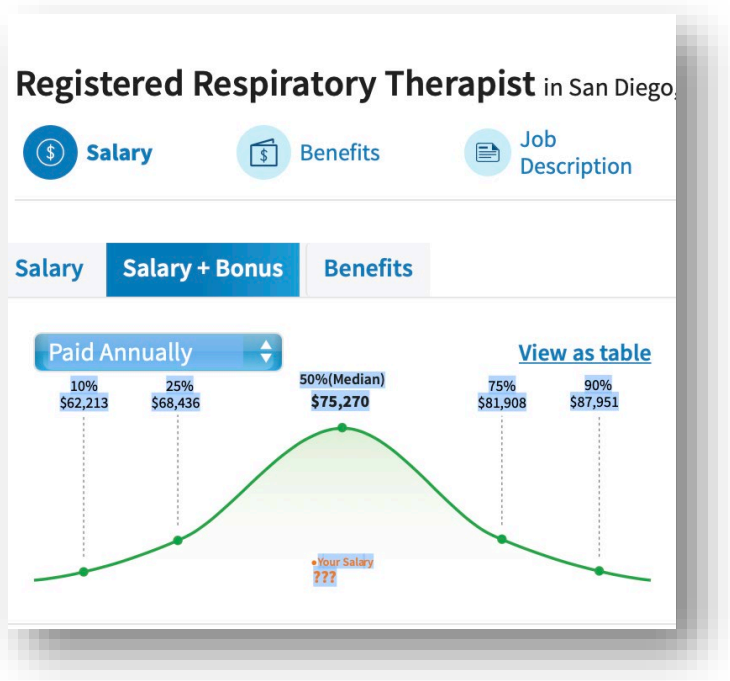
	2019	2018	2017	2016	2015	2014	2013	2012	Total
Graduates	19	21	16	27	22	29	31	31	197
Enrollment	28	32	27	20	25	28	35	40	235

Grossmont College Respiratory Therapy Program will cost a resident student approximately $4,500 to complete the two-year program. To obtain a degree at a proprietary school in the San Diego area, a student would have to pay between $30,000 and $60,000 for the AS degree in respiratory therapy and the credits are not transferable to public institutions if the student wishes to advance their degree.

According to the US Bureau of Labor and Statistics (2020) and the Employment Development Department of California (2020), reports for median wage of RTs has increased over the last few years.

	United States	California	San Diego
RT Hourly Wage	$29	$40	$34
RT Yearly Wage	$61,000	$84,000	$75,000

(https://www.bls.gov/ooh/healthcare/respiratory-therapists.htm)
(https://www.labormarketinfo.edd.ca.gov/OccGuides/Summary.aspx?Soccode=291126&Geography=0604000107)



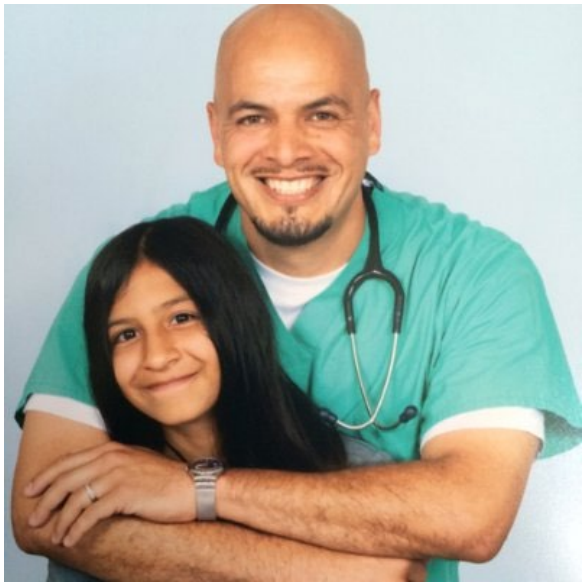
(https://www.salary.com/research/salary/benchmark/registered-respiratory-therapist-salary/san-diego-ca)

"The Respiratory Therapy program at Grossmont College changed my life! It provided me an excellent education, a new skill set, and a new career in just two years! It prepared me for job interviews and gave me exposure to most of the medical systems here in San Diego. Because of this wonderful program and exposure, I was able to interview and secure a position at the local Children's Hospital even before I graduated in 2014. I continue to work there today and am incredibly content with my career choice. Choosing to attend Grossmont's Respiratory Therapy program was one of the best decisions I've made and I definitely recommend it to any prospective student looking for a challenging and rewarding career in medicine." In recent years, Nina was an adjunct clinical instructor for the GC RT Program. Nina is currently an educator at Rady Children's Hospital San Diego.

Nina Haskell, RRT, RCP

To obtain a license to work as a respiratory therapist a student must graduate from an accredited college with a minimum of an Associate Degree in Respiratory Therapy. The PD, DCE, and full-time instructor are active members in the respiratory therapy state and national professional organizations. Within these organizations are educational groups. The educational group membership includes community colleges, state and private universities, and proprietary colleges that offer respiratory therapy degrees. The Program Director is an active member of these educational groups. The Program Director participates in local high school career and health fairs, and campus tours for visiting high school students. The Director of Clinical Education visits local elementary school career days to introduce students to respiratory therapy.

Adjunct instructors are active in the community and Isaac Zamora, a clinical instructor and Grossmont College Respiratory Therapy graduate represents Grossmont College as a frequent speaker for local high schools.



"I am respectfully giving thanks and credit to Grossmont College for preparing me to become a successful Respiratory Therapist. Since 2007, the Grossmont College Respiratory Therapy Department has been my virtual springboard to a better life. From the real world instruction that I was given as a student, exposure to community service, to the continued opportunities for growth that have helped me develop. The same story can be echoed by all of the other Grossmont College RT graduates in my department at UCSD. Collectively, we have earned rewarding, good paying jobs that allow us to provide for our families.

Isaac Zamora, Grossmont College Respiratory Therapy Graduate Class of 2009, UCSD Respiratory Therapist, Clinical Instructor Grossmont College

SECTION 6 - STUDENT SUPPORT AND CAMPUS RESOURCES

PURPOSE OF SECTION 6: To determine how departments utilize various campus services.

6.1 Student Support Services

Are the college's student support services (Tutoring, Counseling, Health Center, Library, Financial Aid) adequate to meet your student's needs? Please elaborate on your answer.

The Respiratory Therapy Program seats a new cohort each Fall. Orientation is held for this new cohort in May before classes begin in August. Students are given an overview of available services and resources on campus. Speakers from counseling, financial aid, and disability services visit the orientation to welcome students and give a brief overview of services provided. The Math and Respiratory Therapy Department jointly developed a math exam to provide students with the opportunity to renew or upgrade math skills before beginning the program. During the new cohort orientation meeting which happens prior to students starting the classes in the program, students are given information about the various resources. Students are referred to the counseling center in the first and fourth semester in the program so that transcripts are evaluated. Students in the RT Program are referred to the Health Center yearly to obtain necessary immunizations and health screenings as these are required to successfully complete clinical courses. Students are also referred to contact health services if they have signs or symptoms of Covid-19.

6.2 Examples of Student Support Services Utilized by RT Students

What services do students in your department/program use most often or that make the most difference? Can you provide any examples where services have clearly improved student retention and success?

Students attend a presentation by the Learning and Technology Resources Center (LTRC) staff during the first few weeks of school to learn about resources available in the LTRC. The LTRC staff includes information about research and the writing of research papers. Students accepted into the respiratory therapy program have completed difficult prerequisites and most have completed all the general education requirements. Students in courses within the RT Program are referred to obtain assistance when necessary, from the English Writing Center and the library resources when they are assigned research papers and asked to review medical journal articles.

Students report using the LTRC Computer Lab, Counseling Office, LTRC Main Library, Health Services, and department specific tutors frequently during the semester. Students rarely reported using or using very infrequently the Career Center, English Reading and Writing Centers, the Math Study Center, Student Affairs, and college Tutoring Center. Students reported satisfaction with most campus resources but there were several comments regarding ineffective, confusing, or conflicting counseling advice. Academic counseling for former, current, and Grossmont College applicants in the Allied Health and Nursing Programs began this semester and is now available on Fridays in the Health Science building. This additional

counseling has received great reviews from students and should increase student survey scores for counseling.

Two sets of each required textbooks are available for loan from the library. In addition to the rental books the Program Director keeps at least one additional copy of each required textbook to loan to students in need.

The Respiratory Therapy Program uses specific surveys to obtain data about the resources used by students. CoARC requires mandated student surveys that must be administered as is without adding or deleting questions.

6.3 College Support Services for Faculty and Staff

Are college support services adequately supporting your faculty and staff? Consider the following support services: IT, Instructional Operations, Business Services, Printing, Bookstore, Maintenance, CAPS, and any other support services important to your faculty and staff.

Yes, the staff and faculty feel supported by the services offered by these departments. They are utilized on an ongoing basis by the full-time faculty that teach on campus. They are rarely used by the adjunct faculty that teach at clinical sites.

6.4 Library Resources

Working with your library liaison, evaluate and provide a summary of the current status of library resources (i.e. books, periodicals, video, and databases) related to the program.

The following report was prepared by Pat Morrison the respiratory therapy library liaison.

Your library program review

Pat Morrison <Pat.Morrison@gcccd.edu>
Tue 3/23/2021 3:30 PM

To: Carey Flores <Carey.Flores@gcccd.edu>
Cc: Peggy Wells <Peggy.Wells@gcccd.edu>; Julie Middlemas <Julie.Middlemas@gcccd.edu>; Pat Morrison <Pat.Morrison@gcccd.edu>

Library Resources for Respiratory Therapy, 2021

Books
The library Respiratory Therapy area, call numbers RC 705 – 779, contains 173 items; 113 electronic books and 30 print books. Additionally, the library owns 30 journals on Respiratory Therapy.

Books are purchased using a complex allocation formula to ensure that departments get their "fair share" of this year's 20/21 $43,000.00 library book budget. The allocation allows for a book budget of $268.55 in Respiratory Therapy for 2020/21. At this time, the library has spent $971.65 for RT books.

There are also two online reference book collections that contain thousands of entries about Respiratory Therapy. These collections, or databases, are called "Gale Virtual Reference Library" and "Credo."

All electronic materials, whether books or journal articles, can be accessed anytime, anywhere.

Periodicals
Most of the Respiratory Therapy periodicals are in electronic format, within library periodical databases. This allows for keyword searching, and anytime, anywhere access. There are over 13 databases that cover Respiratory Therapy topics, leading to tens of thousands of articles.

Two of the best subject-specific databases for Respiratory Therapy are *CINAHL Complete* and *Medline*. In addition, the library also subscribes to a number of multidisciplinary databases, including *Academic Search Premier* and *Gale OneFile*, with access to many more articles in our subject area.

DVDs, Media
The library has a strong collection of databases of videos. *Nursing Education in Video* is particularly useful.

Reserves/textbooks
We have 5 textbooks on reserve at this time.

Patricia Morrison
Librarian
Grossmont College Library

6.5 Student Support Services

How does the program work with the various student support services (i.e. Counseling, EOPS, DSPS) to help students gain access to courses, develop student education plans, make career decisions and improve academic success? How does your program communicate specific and current information that can be used by those student service

groups?

The Respiratory Therapy Program invites representatives from each of these programs to attend our student orientation. Information about each is also included in each syllabus and in the Student Handbook. As a cohort program, instructors are familiar with student issues and available to make recommendations for any of these services. Instructors also post flyers containing this information to Canvas containers so students will have immediate and continuous access. The Program Director meets with the counseling department yearly to describe the program changes and answer any questions the counselors may have. The students in our program rarely report using EOPS services. Each semester several students utilize ARC accommodations and resources.

6.6 Enhancing Teaching with Technology

Describe how the department uses available technology to enhance teaching and learning and to communicate with students?

All courses use Canvas for student communication. In a cohort program that emphasizes community service, job placement, life-long learning, and information to assist students to be successful. Canvas is an important communication tool. The program director has access to at least one Canvas container for each class, each semester so information can be disseminated quickly and efficiently. Students in each cohort form a Respiratory Therapy Club and use Facebook to coordinate activities and communication.

6.7 Technological Resources to Enhance Student Learning

Identify and explain additional technological resources that could further enhance student learning.

The Allied Health and Nursing Division's use of technology has increased greatly with the new facilities. All full-time instructors received I-pads for use in the classroom. Some of the nursing classrooms are being fit for Apple TV and have wireless internet capabilities. Patient issues and clinical information is frequently discussed in all respiratory therapy courses and for this reason use of personal technology is prohibited except when pre-approved by the instructor. Students are provided laptops to use while in the classroom when attending laboratory courses. On-line clinical simulations are now being used supplement clinical and lab experiences through electronic and virtual simulations.

6.8 Adequacy of Facilities

Comment on the adequacy of facilities that your department uses. (e.g., does the room size and configuration suit the teaching strategies?)

The Respiratory Therapy Department has two dedicated lab rooms that are a great improvement from the one classroom used before the new building opened. The rooms are frequently used by other disciplines when not occupied by respiratory therapy. The two lab technicians Pat Murray and Dan Lopez do a phenomenal job of keeping the

room free of clutter and storing any equipment not currently in use.

Lecture classrooms vary from semester to semester depending on the number of students in the cohort. One primary room used for our lecture classes (34-170) received new desks and chairs to facilitate group work. The respiratory therapy classes frequently rearrange the desks but are careful to return the room to its normal configuration. Although the new desks and chairs are a great improvement to the chairs with the attached arm desks, it can be difficult to rearrange the room to accommodate large pieces of equipment, or active role-playing activities.

The Health Science Computer Lab is a wonderful addition to the division. The number of computers, seating, and copying are generally adequate for the number of students. The computer laboratory is not currently open in the evenings, and each semester students request evening hours. The computer lab is frequently used for exams by instructors in the Allied Health and Nursing Division and is unavailable to students during this time.

SECTION 7 – ON-CAMPUS/OFF-CAMPUS INVOLVEMENT

PURPOSE OF SECTION 7: The purpose of this section is for your department to showcase the most meaningful outreach, engagement and retention work that you do, both on and off campus. We are interested in learning what the faculty and staff in your department do maintain/enhance their status as professionals in their field and as instructors, how you represent the college in the community/region, interact with other departments around campus, serve the college and your students, and participate in campus life.

Examples of activities to include:
OFF CAMPUS

- ***Marketing:*** *Flyers, brochures, booths, radio*
- ***Discipline Specific activities:*** *Conferences, Clubs/Organizations, Department Events, Licensing Meetings, Technical Reviews/peer reviewing manuscripts/textbooks and other discipline-specific volunteer activities, regional and state task forces*
- ***Community Involvement:*** *Advisory committees, serving in regional groups, K-12 outreach, Job Fairs, other college-related but not discipline-specific activities*
- ***Professional Development:*** *Attendance, creation/presentation, grants, sabbaticals*

ON CAMPUS

- ***Marketing:*** *Flyers, brochures, booths, Summit newspaper*
- ***Campus Volunteerism:*** *Involvement in college and other department's activities (campus open houses, science fair, water project, helping as a theater usher or at a sports team event)*
- ***Interdisciplinary Collaboration:*** *Collaborating on shared events, cross-listed courses, working with campus student services, linked courses (sharing of expertise/resources between departments to benefit student success, such as guest lectures, shared lab activities, simulation or other special events)*
- ***Professional Development:*** *Workshop Attendance, creation/presentation of professional development activities, grant-writing and sabbatical projects*

Table two on the next page shows how you should organize your activity data. Complete this table with your commentary.

If you need assistance in creating a table, please contact the Program Review Chair. If you are using word, simply select 'insert' from the main menu, then table, and then select the number of columns and rows you want for your table.

7.1 Faculty Professional Development and Community Involvement:

Faculty	Activity/Committee	Year(s)	Value to Students
Aristide, Jacky	ETH State of California Ethics course	2020	how to recognize something unethical
	Pulmonary Function Advance Concepts	2020	teach students about new advances in pulmonary function testing.

	Pulmonary Function spirometry testing	2020	teach students about new advances in spirometry
	CSRC 51st annual convention	2019	teach students about new advances in respiratory therapy
Catungal, Joel	BLS recertification	2021	assess pt for rapid response team
	acls recertification	2020	advance airway management and ETCO2 during code blue
	law and Ethics	2020	charting and correct course of action (i.g. pt refusing tx)
	application pf Passy Muir valve	2020	How to use PMV and the dangers of PMV use
	Tracheostomy Procedures	2020	how to Identify and clean trach
Flores, Carey	Bachelor of Science in Respiratory Care, Candidate to graduate in May 2021	2019-2021	BSRC with a focus on management and education in the field of respiratory care. Improved pedagogy in curriculum. Greater knowledge and understanding of intersectionality, equity, and diversity and how to incorporate in management, education, and clinical practice.
	Academic Senate	2016-2020	Participate in discussions about equity, diversity, student success and engagement.
	Respiratory Therapy Club Advisor	2016-2021	Assist the Respiratory Therapy Clubs on campus with activities and community learning activities.
	Marketing activities to include monthly Program Previews, attendance at health fairs and high schools. Distributing flyers, posters, and lawn signs. Visit college science classes.	2015-2021	Increase awareness of the Respiratory Therapy Program and lung health on campus and in the community.
	Ethical Issues and Decision Making for Respiratory Therapists	2015-2021	Incorporate ethical discussions in curriculum and interdisciplinary activities
	CSRC- Reducing Exacerbation Risk Early in COPD	2019	Incorporate current research in course curriculum
	Non-Conventional modes of Ventilation	2019	Greater knowledge of ventilator modes for gaining insight that can be incorporated in curriculum. Required expertise in neonatal and pediatric field to teach RESP 150.
	CSRC Annual Conventions	2017-2020	Network with managers and educators
	CSRC San Diego Region Meetings	2015-2021	Help students network with hospital staff, managers, educators, and other clinicians and provide volunteer opportunities for students within professional organizations
	American Lung Association Events	2015-2021	Promote active participation in the community for improved health outcomes, research, and raising funds for organizations that promote health and wellness. Coordinate and assist with student volunteer involvement in events.
	AARC Annual Conventions	2015-2019	Network with managers and educators.
	IPE Committee:	2015-	Plan, organize and facilitate student

	Intradisciplinary learning activities and guest lecturer for other disciplines.	2021	teamwork and critical thinking skills. Collaborate with colleagues to design and implement curriculum that involves several disciplines and departments within the Allied Health and Nursing professions.
Handley, Rebecca	Completed Master's in education with an emphasis in reading	2016	improved pedagogy in curriculum with a focus on how to improve vocabulary and reading skills while in the RT program
	Presentation to division on ELS in Health Professions	2017	Provide valuable information to faculty about the struggles of ESL students in health professions
	Evidence Based Strategies for Weaning from Mechanical Ventilation	2019	Provide new strategies for weaning from mechanical ventilators
	Disaster and Mass Casualty Incident Planning Guide for Healthcare Professionals	2019	Provide key information about the respiratory therapists' role during a mass casualty or disaster
	Pulmonary Edema Webinar	2019	Provide new strategies on the treatment and management of pulmonary edema
	Pulmonary Rehab Webinar	2019	Provide new strategies on the treatment and management of pulmonary rehab
	Ethical Issues and Decision Making for Respiratory Therapists	2019	
	Neonatal Respiratory Care Webinar	2019	Provide new strategies in the care and management of neonates
	CoARC Webinar: Create Compliance and Accountability with Accreditation Requirements	2021	
	Zoom Security Training	2021	Provide a safe zoom environment for students
	IPE Committee	2018-present	Provide an opportunity for students to learn in a multidisciplinary environment
Hyde, Kim	EBUS training	2018	To be able to teach the students about cancer staging
	Restraint Class	2019	How to avoid dangerous situations
	California Law and Ethics	2020	To be able to discuss ethical behavior in Respiratory Care
	Bedside spirometry testing	2020	The value of bedside spirometry
	ACLS Certification	2021	To teach advanced airways and code blue priorities
	NICU training	2021	NICU education
Jackson, Victor	New Hire Preceptor	2015 - present	Able to teach about UCSD Respiratory procedures and policies
	Hiring Committee	2015 to present	Able to teach students what we look for in a RCP
	Bronchoscope procedures	2013 to present	Able to show and teach about the procedure
McCauley, Chris	Preceptor Trainer	2010 - present	Teach new hires and students about policies and procedures and protocols
	Bronchoscopy procedures	2007 – present	teach students proper way to assist Drs perform bronchs on patients
	PALS certification	2015 - present	Burn unit receives peds patients and we teach students how to prepare for these patients
	Rapid Response Team	2007-	teaching students to assess situations

		present	where patients are rapidly having problems and need to use assessment skills to help the patients.
	California Law and Ethics	2020	to be able to teach ethical behavior in respiratory therapy
Mijares, Anna May	Patient Empowerment Coach	2017-2021	teaching empowerment to patients & increasing adherence and reducing sentinel events in the hospital
	Rapid Response Team	2018	teaching students how to recognize situations where a patient is deteriorating rapidly and how to respond in these situations
	Special Procedures RCP	2017-2021	exposure to bronchoscopies, EBUS', transports to MRI CT IR, percutaneous tracheostomies, downsizing trachs, changing to cuffless trachs, passy muir valse trials
	ECMO RCP	2020-2021	learning the different types of ECMO, sweeps, flows, ABG pre and post oxygenators
	COVID ICU start up	2020-2021	The in's and outs; beginning and end of pandemic constant changes and findings
	Radiometer Champion	2021	ABG analysis and troubleshooting
	Hat Program	2021	Age friendly care utilizing the 4 M's (what matters most, mobilization, medication & mentation
	Pulmonary Care Conference	2018	passing down important knowledge, new pulmonary practices and findings I learned from seminar/conference
	New Hire Preceptor	2017-2021	How we train our new hires and the process
	Guidelines for Pulmonary Rehab Programs	2021	Continuing education/knowledge I can pass down to the students
	Respiratory Tract Infections	2019	Continuing education/knowledge I can pass down to the students
	New hire RN pulmonary rotation	2017-2020	New hire nurses that shadow the pulmonary department to get an understanding of what and how other departments operate so they are exposed to different departments
	BLS renewal	2021	Basic Life Support knowledge
	ACLS renewal	2021	Advanced Cardiac Life Support knowledge
	Law and Ethics renewal	2021	Ethical behavior in Respiratory Care
Norberg, Melissa	Critical Care Transport Team	2020, 2021	Considerations in transporting critically ill, intubated pts
	Code Blue Committee	2019-2020	Importance of knowing role and communication in codes
	NRP Certification	2021	Considerations in caring for neonates
	Preceptor for New Hires	2019-2021	Exemplify expectations for new hires
	BLS renewal	2020	Foundational basic life support skills and assessments
	EBUS training	2018	Identify the importance of RT's role during EBUS procedure
Russell, Tyler	C.O.R.E. Award, Sharp Grossmont Hospital	2020	Teamwork excellence

	Skills fair instructor	2020	taught class on inhaled nitric oxide
	NRP certification	2021	proficiency on younger patient population
	PALS certification	2021	proficiency on younger patient population
	Preceptor for new hire RCPs	2019	gain new perspective
Savage, Matt	Covid 19 Preparation inventory of all Respiratory Departments capacity of ventilation for pandemic	2019 to present	Understanding how students could Play role in treating pt. as extenders in pandemic situations.
	Champion in PPE Doning and doffing PPE safe practice staying safe in pandemic in collaboration with anestethia with intubations	2019 to present	Showing students safe practice guidelines using PPE including PAP devices and structure and repetition in PPE and collaboration with other services.
	COVID-19 task force	2019 to present	Looking and understanding Pathology of the Corona Virus the interventions and outcomes.
	CSRC SDIE Day at the races	2019	Information to relay best practice in RT hemodynamics,Vaping,VBG interpretation.
	Kettering Seminar	2019	Intergrations of clinical to prepare students for NBRC examination.
	ACLS	2018	Convey current knowledge regarding Code and ACLS practice
	PMV	2017	Aspects Advantages and Dangers of PMV with pt. on and off mechanical ventilation.
	Meta-Neb course	2017	Convey HFOC and Pep therapy best practice.
	AARC ethics	2016	Include Ethics in daily practice in all aspects of care.
	CSRC SDIE Day at the races	2017	Conference for Respiratory Keeping current to teach students valid information.
	Exploring New Modes Ans Options for NIV	2017	Relate to the importance of NIV and the cautions of choosing appropriate pts.
	The art of teaching at the bedside	2017	Allow Student to teach and convey accurate information.
Sitta, Roma	Hospital Rapid Response Committee	2015	Respond with the charge RN of ICU to emergency events that preempt code blues
	Rationales and Applications for Capnography Monitoring During Sedation	2015	Gain skills for transporting critical patients to pass on to my Grossmont students
	EPIC trainging 1,2,and 3	2018	RT department Super User, able to instruct my students efficiently in the use of EPIC charting
	Swallow Function: Passy Muir Valves for Rehabilitation	2017	Gain new knowledge to assist better patient outcomes, specifically, eating with a trach. Put this knowledge to practice in conjunction with Speech Therapy.
	STABLE Class Rady Children's Hospital	2019	infant Post- Resuscitation Care, brought theses skills back to my Level 2 SCN
	Drager: Preemptive use of APRV to prevent ARDS	2016	Critical care ventilator skills I was bale to pass on to my students
Startz, Farrar	Hospital Code Blue Committee	2013-present	Analysis of resp arrests and drill down of ways to decrease arrests
	RT ECMO program	2018 to present	Advancing RT role in clinical practice

	Managing RT orientation/preceptor program	2013 to present	well versed in how to train new employees and how to train in a comprehensive and safe manner
	Involved in pulmonary clinical trials	2006-present	Advance RT role in clinical practice
	Teaching physician ventilator classes	2013 - present	Advance modes and ventilatory strategies
Valentine, Jodee	RRT exam from the NBRC	2018	Discuss test taking through the NBRC
	Pillar of Excellence Award recipient at Sharp Grossmont Pulmonary Dept	2020	People Pillar
	C.O.R.E. Award from Sharp Grossmont Hospital	2020	People Pillar
	Six Sigma White Belt	2018	Lean Six Sigma training
	Six Sigma Yellow Belt	2019	Lean Six Sigma training
	Law and Ethics for California	2021	Required to maintain licensure
Wells, Peggy	Marketing activities to include attendance at health fairs and high schools. Creating flyers, posters, and lawn signs. Visit college science classes.	2015-2021	Increase awareness of the Respiratory Therapy Program and lung health on campus and in the community.
	Collaboration with math department to develop math practice exam and review for incoming students.	2015	Assure incoming students have appropriate math skills to be successful in the respiratory therapy program.
	Respiratory Therapy Club Advisor	2015-2021	Assist the 2 Respiratory Therapy Clubs on campus with activities and community learning activities.
	Peer review of 5 textbooks used for respiratory therapy education.	2016-2021	Remain current in current research and educational textbooks available in the profession.
	Education Chair or Secretary of San Diego Region CSRC	2017-2021	Promote the profession of respiratory therapy and assist students with networking activities.
	Member of CSRC State Audit Committee	2019-2021	Review state policy and procedure manual.
	American Lung Association	2015-2021	Active participant in educational and volunteer fund raising activities. Assist students in community learning activities and networking opportunities.
	Monthly program reviews	2015-2021	Educate students and the public about the Respiratory Therapy Program at Grossmont College.
	Participate in College wide educational activities. Examples include Week of Welcome and Great American Smoke Out and career fairs.	2015-2021	Student outreach and education
	Respiratory Therapy Advisory Committee	2015-2021	Co-chair of Advisory Board. Assure program meets community needs. Networking opportunities for students.
	Intradisciplinary learning activities and guest lecturer for other disciplines.	2015-2021	Facilitate student teamwork and critical thinking skills. Collaborate with colleagues to share knowledge and skills.
	Monthly food distribution to Grossmont College Students	2019-2021	Assist with hunger and food insecurity to help with retention.

	Semester Professional Development	2015-2021	Completed professional development activities every semester.
	Participated in Equity, Diversity, and Opportunities to include:	2021	Awareness of intuitional racism and develop knowledge and skills
	Completed a minimum of 36 units of continuing education in the field of respiratory therapy every 2 years.	2015-2021	Maintain professional license and remain up to date on current research and community practices. Assure curriculum is updated appropriately.

7.2 Reflection of Department's Activities

Please provide an overall reflection on your department's activity displayed in your table.

The profession of Respiratory Therapy requires continued voluntary and mandated education to maintain licensure. All instructors maintain current licensure and have advanced credentials in the field of Respiratory Therapy. Health care is a dynamic, rapidly changing environment and having many adjunct instructors that work in diverse facilities in the community which helps the RT Program maintain currency. Many times, hospitals provide continuing education for the staff and students are invited to attend the sessions. Many of our instructors are active with state and national professional organizations and through these contacts can arrange for guest speakers for students and or instructors in current topics affecting respiratory therapy. The Respiratory Therapy Program encourages instructors to attend learning opportunities focused on education and student success. Many of our instructors attend the national convention each year where educational lectures are included in the program.

The Program Director and Director of Clinical Education are members of both the state, CSRC, and national, AARC, professional organizations. All instructors, full-time and adjunct, actively attend conferences and continuing education sponsored by these organizations. Because respiratory therapists are required to attend continuing education to keep licensure current our instructors attend educational sessions at local hospitals and in return, we invite community members to educational opportunities held on campus prior to access to campus being restricted due to Covid-19. The number of instructors necessary for our clinical rotations assures that the college maintains frequent and appropriate contact with the community.

Full-Time Faculty participate or have participated on the following committees: Academic Senate, Chairs and Coordinators, Facilities, and Book Store.
The department frequently participates in hiring committees and division student grievance hearings. The Program Director is a member of International Relief Teams and has attended medical and non-medical work teams in Latvia, Louisiana, Mississippi, and California. The Program Director also participates in activities sponsored by the United Methodist Church. These activities include camp first aider at youth summer camp, vacation bible school counselor, work teams in the United States and Russia, and participant in Habitat for Humanity.

Respiratory Therapy has many adjunct instructors with excellent clinical skills. Most of

these adjunct instructors work full-time at local hospitals and find it difficult to attend traditional staff development activities. The Respiratory Therapy Department offers staff development focusing on educational concepts and current research to the adjunct faculty at bi-monthly staff meetings. The meetings are scheduled before the end of the twelfth week of the semester so the instructors can use the experience as staff development. Our division Dean is constantly looking for and providing innovative professional development activities for all the Allied Health and Nursing departments.

Students are required to participate in community service. Students frequently partner with the American Lung Association (ALA) to promote lung health. The ALA activities are well supported by the community and allow interaction between the school and the community. The Program Director actively supports the ALA by serving on planning committees for lung health activities.

Respiratory Therapy has a very active Advisory Committee with representatives from local health facilities, medical equipment vendors, community organizations instructors and student representatives. The committee is chaired by a community member and meetings are held once a year. Additional meetings are scheduled as needed, for example, when access to hospitals and laboratories was restricted and the department wanted to know the hospital requirements for student performance of skills competencies. The last meeting was held on August 15, 2020.

Recommendations from the Advisory Committee include changes to department goals during the pandemic and the importance of students demonstrating clinical competencies satisfactorily despite the closing of the campus laboratories and hospital restrictions. The Respiratory Therapy Program listens very carefully to our Advisory Committee and attempts to implement recommendations. As an example, the advisory board has been recommending additional clinical hours for many years. Increasing clinical hours required an increase in LED and reallocation of units for other courses. It took several years and support of the Dean and the Curriculum Committee to accomplish the change. This change has been in place for several years, and many skills competencies are now demonstrated in both a laboratory and clinical settings prior to students graduating.

SECTION 8 – FISCAL & HUMAN RESOURCES

PURPOSE OF SECTION 8: To assess if the college is meeting the resource needs of your department and if your department is using those resources efficiently.

Fiscal Resources

Refer to the Table provided that shows Enrollment, % Fill, Earned WSCH, FTEF and WSCH/FTEF to answer these questions. Data for Fall, Spring and Summer semesters are provided separately.

	FA15	***FA16***	***FA17***	***FA18***	***FA19***
Earned Enroll	187	145	183	206	211
Max Enroll	176	145	187	213	227
% Fill	**106.25**	**100.00**	**97.86**	**96.71**	**92.95**
Earned WSCH	977.69	722.66	979.46	1067.39	1169.80
Total FTEF	6.36	5.01	5.99	6.47	8.20
Earned WSCH/FTEF	**153.72**	**144.24**	**163.52**	**164.98**	**142.66**

	SP16	***SP17***	***SP18***	***SP19***	***SP20***
Earned Enroll	181	139	154	206	195
Max Enroll	174	146	140	219	216
% Fill	**104.02**	**95.21**	**110.00**	**94.06**	**90.28**
Earned WSCH	936.74	727.44	781.97	1031.10	1072.20
Total FTEF	7.82	6.52	6.70	7.89	9.68
Earned WSCH/FTEF	**119.79**	**111.57**	**116.71**	**130.68**	**110.76**

	SU15	***SU16***	***SU17***	***SU18***	***SU19***
Earned Enroll			4	11	12
Max Enroll			20	11	11
% Fill	**--**	**--**	**20.00**	**100.00**	**109.09**
Earned WSCH			8.00	22.00	12.00
Total FTEF			0.05	0.12	0.13
Earned WSCH/FTEF	**--**	**--**	**160.00**	**183.33**	**92.31**

8.1 Enrollment Patterns, Maximum Enrollment, and % Fill

Describe any patterns in enrollment; maximum enrollment and % fill in the program since the last program review. What are typical section maximum sizes (capacity) for

your courses and what dictates those caps? Have you changed the number of sections offered and/or section sizes in response to changes in demand? If so, what effect has it had?

Respiratory Therapy is a cohort program. One cohort is seated each Fall. The program is accredited to accept up to 45 students in each cohort. The number of students accepted depends on many things including availability of clinical sites and the graduate employment rates. The fill rate is directly related to the number of students that successfully complete all courses during a semester. If a student is unsuccessful in one course, then they must exit the program and re-apply the following year. Because we are cohorted the seat is left empty from the time the student exits the program until that cohort graduates. The first and second semester have the lowest retention rates. We offer only 1 section of all lecture courses but two or three sections of courses with labs. The number of lab sections is dictated by the size of the cohort.

8.2 Earned WSCH, FTEF and Earned WSCH/FTEF

Describe and explain any patterns in Earned WSCH, FTEF and Earned WSCH/FTEF since the
last program review. Please explain changes in FTEF due to changes in faculty staffing levels. For courses/sections with low Earned WSCH/FTEF explain their importance in the program and measures the department/program has taken/plans to take to improve efficiency and/or balance low and high efficiency offerings and/or maximize course % fill.

Our WSCH, FTEF and Earned WSCH/FTEF are directly related to the number of students in each cohort. Our accreditation body mandates that no more than 6 students may be in a clinical site at one time. The community hospitals that we use for clinical rotations have capped the number of students they will have in any rotation at 4 students. This means that for every additional 4 students we accept we must hire an additional adjunct instructor at a load of between 0.15 and 0.67.

8.3. Budget

For money that you get from the college and/or from Perkins funds as part of your budget, is this amount adequate? What is this money used for to operate your department? If it is not adequate, please explain how additional funds would be used to improve student learning and success.

We are fortunate to have the equipment and facilities that we currently have. Our lab equipment is extremely expensive and has an estimated useful live of 10 years. The equipment in our labs is matched to the equipment used in the community. Therefore, we have major expenses each year in order to keep our equipment state of the art and current with community standards. extremely Our Dean has been extremely effective in obtaining grands and funds for this equipment. Our program is very intense and many of our students require extensive tutoring to be successful. Perkins funds are used for

this tutoring. In the last several years we have not had enough money in our Perkins account for the amount of tutoring needed for student success. Other departments in the division and in the College have transferred money to our department for this tutntion will fall.oring. If this transfer of funds is not available in the future we believe that our success rate and retention rate will fall.

PURPOSE OF SECTION 8.4: The committee is looking to recognize program/department efforts for outside funding.

8. 4 Additional Funding

If your program has received any financial support or subsidy outside of the college budget process (grants, awards, donations), explain where these funds are from, how they are used, and any other relevant information such as whether they are on-going or one-time.

Several grants have been obtained by the Dean of Allied Health and Nursing and used to purchase expensive lab equipment. CARES Act funding has been a great help to fund additional disposable and non-disposable lab equipment The nature of our program requires students to use clinical distancing and to interact with their lab partners. Additional equipment that was disinfected in the past now is disposed of and needs to be replaced for the next cohort.

Human Resources

NOTE: Please refer to the table provided by the Program Review Data Liaison to answer the following questions.

PURPOSE OF SECTION 8.5 & 8.6: The committee is interested in knowing about the people in your department and what they do. The committee also wants to understand your department/programs staffing needs.

	FA15	***FA16***	***FA17***	***FA18***	***FA19***
FT Faculty Count	2	3	3	3	3
PT Faculty Count	12	9	11	10	13
Full-Time FTEF	1.05	2.42	2.42	2.52	1.97
X-Pay FTEF	0.24	0.04	0.12	0.35	0.72
Part-Time FTEF	5.07	2.55	3.45	3.60	5.52
Total FTEF	6.36	5.01	5.99	6.47	8.20
FT Percent	**20.28%**	**49.10%**	**42.40%**	**44.36%**	**32.80%**
Permanent RT	0.69	0.69	0.69	0.69	0.84
Temporary RT	0.45	0.30	0.45	0.30	0.30

8.5 Role of Full-Time versus Part-Time Faculty

Describe the roles and responsibilities of full-time versus part-time faculty in your department. If any trends or changes are apparent in the past six years, please explain the reasons for them.

Full-time instructors currently teach all on campus courses. Part-time faculty teach all of our clinical courses. The number of part-time instructors is directly related to the size of the cohort. The FT percent is challenging to increase as most facilities require the instructors of those courses to also be employees of the facility.

8.6 Staffing

Are the current levels of staffing of faculty adequate? Discuss part-time vs. full-time ratios and issues surrounding the availability of part-time instructors as well as duties and responsibilities of full-time faculty members that influence their loads (such as reassigned time and use of overload).

The Release Time chart is inaccurate. Although we were granted 0.45 RT for our accreditation mandated Director of Clinical Education (DCE) we were denied the use of the entire amount and the DCE only received 0.30 Release time for all semesters. The amount of RT for the DCE is inadequate. This mandated position requires hours during semester breaks and the summer break. As cohort size increases so does the work of the DCE. The DCE and Program Director are required to do many tasks normally assigned to an administrative assistant. The Respiratory Therapy Department has not had an administrative assistant for over a year. Six years ago, we had a full-time administrative assistant that was downsized to a part-time assistant. Other administrative assistants in the department are assigned to assist us with administrative tasks but because they do not have the time to complete many of these time sensitive duties the DCE and the PD have adopted many of these tasks.

Several courses in our major require extensive lab hours. It is difficult to have a part-time instructor as the lab instructor when they are unfamiliar with the content delivered by the lecture course instructor. Student success is greater when the instructor assessing the student is the instructor of both the lab and lecture portion of the course. All full-time instructors work well together and are able to share courses but this usually results in overload. All full-time instructors perform additional duties required to keep accreditation standards and program quality high.

8.7 Staffing Requests for Faculty Positions

If staffing levels are not adequate, give a justification of your request for increased Full-Time faculty based on how this position would contribute to basic department function and/or the success, retention and engagement of students in the program.

8.8 Classified Staff & Student Workers/Tutors

In the table below, list non-faculty positions that are responsible to your program (by title rather than by individual name). This list should include classified staff as well as work study and student workers.

Indicate the FTE/hours and where funding comes from for these positions. Add or delete rows to the table as needed. If you have questions on how to complete this table, please contact the Program Review Committee Chair.

Position	Funding	FTE/Hours					
		YR 1	YR 2	YR 3	YR 4	YR 5	YR 6

8.8 Staffing Requests for Non-Faculty Positions

Briefly describe the duties for each position. Include a discussion of any changes in terms of non-faculty staffing and describe the impact on basic department function and/or the success of students in the program. Are current staffing levels adequate in non-faculty positions? If not, give a justification of your request for increased resources.

The Respiratory Therapy Department is in desperate need of full-time administrative support. We have many clinical requirements that are time sensitive. Instructors have been interrupted during classes to handle these time sensitive issues on more than one occasion. We have submitted for a replacement for this position for the last 2 cycles but have been denied each time. We have heard that the position is approved but waiting in the que to be filled.

SECTION 9 – SUMMARY AND RECOMMENDATIONS

PURPOSE OF SECTION 9: The purpose of this section is to demonstrate how your department/programs ties in to the college's 2017 – 2022 Strategic Plan targeted goals of Outreach, Engagement and Retention.

9.1 Department Strengths

Summarize program strengths in terms of:

- *Outreach*
- *Engagement*
- *Retention*

9.2 Department Weaknesses

Summarize program weaknesses in terms of:

- *Outreach*
- *Engagement*
- *Retention*

9.3 Concerns & Future Needs

Describe any concerns that may affect the program before the next review cycle such as retirements, decreases/increases in full or part time instructors, addition of new programs, external changes, funding issues etc.

Required BS degree
1 FT retirement

9.4 Recommendations & Goals

Make a rank ordered list of program recommendations for the next six-year cycle based on the College's new Strategic Plan which includes outreach, engagement, and retention.

Summarize program strengths and weaknesses in terms of:

- *teaching and learning*
- *student access and success*
- *implementing and executing the department's vision and mission statement*
- *fiscal stability*

Teaching and Learning Strengths:

- Dedicated full-time instructors interested in student success

- Collaboration of full-time and adjunct instructors
- Outstanding adjunct instructors in local health care facilities
- Implementing technology into the program
- Tutoring services availability
- Students eager to learn and graduate with a profession that will allow them to support their families.
- Director of Clinical Education with Presidential Discretionary Reassigned Time
- Equipment and supplies for student learning equivalent to facilities in the community

Teaching and Learning Weaknesses:

- Availability of adjunct instructors
- Availability of clinical facilities
- Students unprepared for rigors of program

Student Access and Success Strengths:

- Availability and quality of tutors
- Remediation action plan to assist struggling students
- Licensure pass rates are highest of all San Diego Schools
- Availability of faculty to students
- Student cost for the program

Student Access and Success Weaknesses:

- Students unprepared for rigors of program
- Unrealistic expectations of students about program and profession

Department Mission Statement Strengths:

The Respiratory Therapy Department's Mission Statement was revised at an Advisory Meeting in 2012. We feel that it is appropriate and describes our mission to our students.

Our Mission Statement:

The Respiratory Therapy Program of Grossmont College shall facilitate student growth in the allied health specialty of respiratory care. Major emphasis will be directed towards helping each student develop the knowledge, skills and attitudes necessary to becoming a competent, well-rounded health care team member.

Program Concerns

Describe any concerns that have affected or that you anticipate affecting the program before the next review cycle. These may include items such as increases or decreases in number of full-time and adjunct faculty, sections offered, and growth or decline of the program.

Required BS degree to obtain license in the state of California
Full-time faculty replacement
Adjunct instructor recruitment and retention

Rick Ford, BS, RRT, FAARC,
Director of Pulmonary Services
University of California San Diego Medical Center, Retired AARC Member

I can share with you that the future is promising. Much of that is driven by the unique value of respiratory therapists. Their medical scope is broad, they are high tech/high touch practitioners, they are available 24-7, and work in all areas using staffing models that flex with demand. Departments throughout San Diego are looking at positioning RCP's in the roles of discharge planning, case management, and home care follow-up as Chronic Obstructive Lung Disease is on the rise and COPD readmission will now cost the hospital. We can help avoid those costly re-admissions. …We do however have a problem in San Diego that too many of the private RC programs have invaded our region. Over time Grossmont has a tremendous opportunity to be the regions leader in providing advance practice education in respiratory care. The future offering of a bachelor's Degree in Allied Health is something I hope Grossmont pursues. For Respiratory Care, it is likely a Bachelor's Degree will be an entry level requirement within the next 3-5 years.

Program Goal per Advisory Committee Recommendation

Goal: Work with the Counseling Department and Articulation Officer to pursue a 2+2 Bachelor's degree with local universities.	
Status of Goal	In-Progress
What activities did you undertake to achieve this goal?	The Program Director and full-time faculty met with the Dean and Program Director that oversee the Bachelors of Science in Respiratory Care pilot program at Skyline College in the San Mateo Community College District. Our full-time faculty instructor, Carey Flores, is scheduled to obtain a BSRC from Skyline College and graduate in May 2021. This has increased our department's awareness of the curriculum and processes necessary to bring a BSRC degree to Grossmont College. The Program Director is in the

	process of gathering data and documentation to prepare for implementing a BSRC here at Grossmont College if the state would allow community colleges to offer such a degree.
What challenges or obstacles have you encountered?	The state must determine if a BSRC may be offered at other community colleges with the data obtained from the pilot programs and community support. AB 927 is currently in committee in the State Legislature.
Has this goal changed and why?	This goal has not changed and will be even more important in the next few years. Respiratory Therapy is moving towards requiring a bachelor's degree to obtain licensure as a respiratory therapist.

Curriculum Development Goal

Goal: Review and revise curriculum as needed to reflect the standards and scope of practice as outlined by CoARC, NBRC, and RCB (accrediting, credentialing, and licensing agencies).	
Status of goal:	Ongoing
What activities did you undertake to achieve these goals?	Yearly surveys of graduates and hiring managers. Analyze exam results of graduates and revise course curriculum to match standards and scope of practice as outlined by accrediting, credentialing, and licensing agencies.
What challenges/obstacles have you encountered?	It can be difficult to keep equipment used in the field of respiratory therapy current as it is very expensive.
Report and explain the data that you have to verify progress toward your goal?	Accreditation reports track the number of graduates that take and pass the exam. Graduate scores improved from obtaining average pass rates of 46% on the Clinical Simulations Examination (CSE) to pass rates of 78% after these resources were implemented as shown in Appendix 5.
Has this goal changed and why	Ongoing changes are made to keep students current with TMC Detailed Content Outline and examination format of questions.
How did the achievement of your unit goals help move the college forward toward fulfillment of the planning priority goals in its strategic plan?	Students must pass board exams including the CSE to become Registered Respiratory Therapists. Students must obtain an RRT credential to apply for a license and work in the state of California. The program can increase the number of students who are seated in a cohort based on student success on board examinations and job placement rates in the community.

Student Success and Support Goal

Goal: Increase graduate passing the registry exams that changed in 2015 and again in 2020 as required by the accrediting body	
Status of goal	Ongoing
What activities did you undertake to achieve these goals?	Added electronic simulations curriculum to RESP108, RESP116, RESP150, and RESP205 as these as similar in content and format of board exams. Reviewed TMC Detailed Content Outline, a document provided by the National Board for Respiratory Care, which is the professional organization that administers the registry exams. The review led to implementation of additional content areas in the course curriculum to keep information up to date with the ever-changing medical information and technology.
What challenges/obstacles have you encountered?	The electronic simulations incurred a cost to add this software to the computer lab in building 34. Students were unable to access this computer laboratory during the remote training circumstances due to Covid-19. The students were required to purchase additional software that they can access from home to complete practice simulations. This resulted in an increased cost of materials to students.
Report and explain the data that you have to verify progress toward your goal?	Accreditation reports track the number of graduates that take and pass the exam. Graduate scores improved from obtaining average pass rates of 46% on the Clinical Simulations Examination (CSE) to pass rates of 78% after these resources were implemented as shown in Appendix 5.
Has this goal changed and why	Ongoing changes are made to keep students current with TMC Detailed Content Outline and examination format of questions.
How did the achievement of your unit goals help move the college forward toward fulfillment of the planning priority goals in its strategic plan?	Students must pass board exams including the CSE to become Registered Respiratory Therapists. Students must obtain an RRT credential to apply for a license and work in the state of California. The program can increase the number of students who are seated in a cohort based on student success on board examinations and job placement rates in the community.

PROGRAM RESOURCES AND DEVELOPMENT GOAL

Goal: Support the role of the Director of Clinical Education (DCE) to strengthen and broaden the local educational partnerships with hospitals and clinics to ensure relevant clinical experiences.	
Status of goal	Complete – and ongoing
What activities did you undertake to achieve these goals?	Director of Clinical Education received reassigned time. This reassigned time allows the Director of Clinical Education to strengthen and broaden local partnerships. The Director of Clinical Education is responsible for maintaining contact and placing students in relevant clinical experiences. Instituted visits by the Director of Clinical Education to each clinical site at least once every eight weeks.
What challenges/obstacles have you encountered?	Difficult to obtain and keep requested reassigned time. Recommendations from the CoARC, the Commission on Accreditation for Respiratory Care programs, mandates the standards and requirements for this position.
Report and explain the data that you have to verify progress toward your goal?	The Accreditation Committee applauds and appreciates the personal contact between the Director of Clinical Education and the local facilities.
Has this goal changed and why	Although we received additional funding for reassigned time, support needs to be continued. Changing and increasing regulations and requirements require additional time to ensure proper placement of our students. There is fierce competition for clinical placements and the Director of Clinical Education needs to be visible to the local facilities to maintain our clinical sites.
How did the achievement of your unit goals help move the college forward toward fulfillment of the planning priority goals in its strategic plan?	Having professional contact with hospital managers, educators, supervisors, and hospital staff helps maintain our student's clinical placement at local hospitals.

Community Outreach/Response Goal

Goal: Continue to have a diverse and dedicated Advisory Committee comprised of medical professionals that provides direction for the RT program.	
Status of goal	Continuing
What activities did you undertake to achieve these goals?	Yearly survey of Accreditation Committee to determine effectiveness. Responsiveness to the Committee's recommendations, for instance the Committee previously met in January but requested the meeting be moved to August to avoid the cold and flu season, when hospitals are the busiest. Recruited new members to the committee and elected a community member to be the committee chair.
What challenges/obstacles have you encountered?	Committee members are very busy, and it can be difficult to get participation at meetings, and to get responses to emails.
Report and explain the data that you must verify progress toward your goal?	Committee membership has grown. Results of surveys indicate that the Advisory Committee values it's role of providing direction to the RT program.
Has this goal changed and why?	No changes
How did the achievement of your unit goals help move the college forward toward fulfillment of the planning priority goals in its strategic plan?	Our community advisors help us determine the curriculum and competencies that are vital for our students to successfully complete in order to obtain jobs in the community. Managers, educators, supervisors, and hospital staff are members of our Advisory Committee. They help us understand what our students must do to have successful job interviews and careers.

References

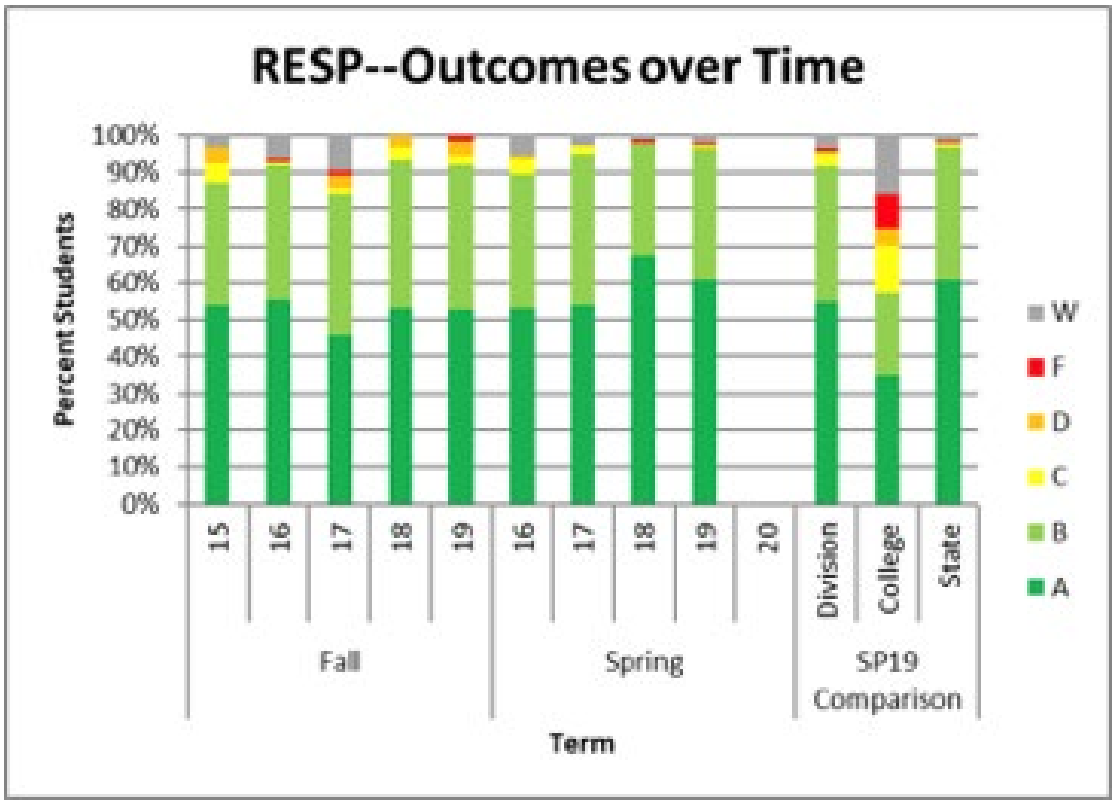
Brown, K., Mudd, S., Perretta, J., Dodson, A., Hunt, E., & Nelson McMillan, K. (2021). Rapid Cycle Deliberate Practice to Facilitate "Nano" In Situ Simulation: An Interprofessional Approach to Just-in-Time Training, *Critical Care Nurse*, 41(1):e1-e8. doi: 10.4037/ccn2021552.

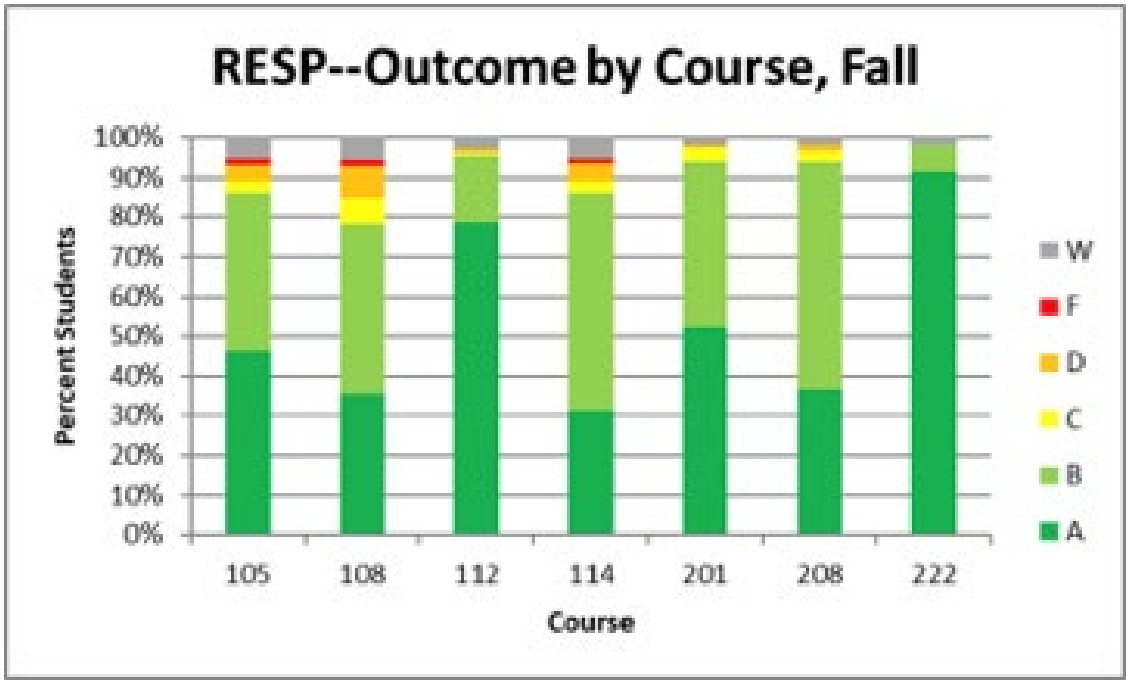
Commission on Accreditation for Respiratory Care (2021). Accreditation Resources: Progress Reports. Retrieved from http://www.coarc.com

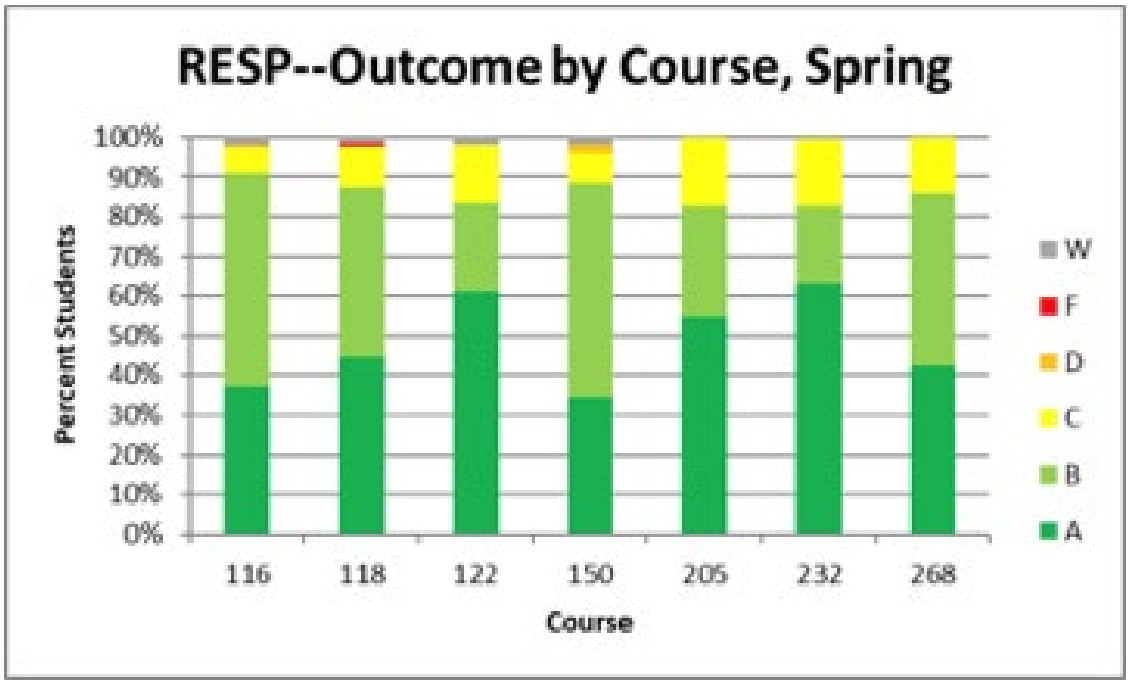
Talevski, J., Wong Shee, A., Rasmussen, B., Kemp, G. & Beauchamp, A. (2020). Teach-back: A systematic review of implementation and impacts. PLOS ONE. Retrieved from https://doi.org/10.1371/journal.pone.0231350

APPENDICES

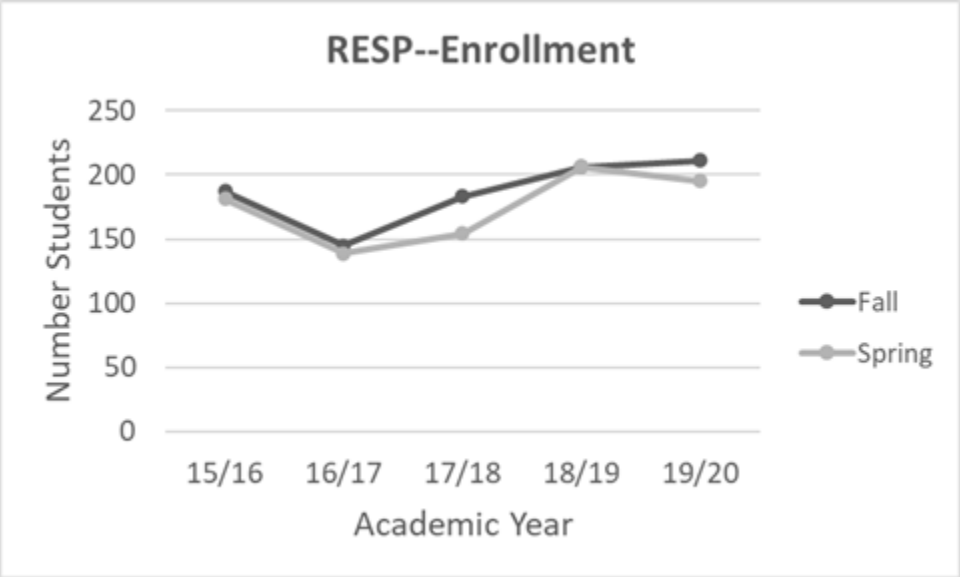
Appendix 1. Grade Distribution Summaries 2015-2021






RESP--Outcome by Course, Spring
Percent Students
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
116
118
122
150
205
232
268
Course
W
F
D
C
B
A

Appendix 2. Enrollment Data



Disaggregated Enrollment Data

Ethnicity by Term - Count of Students

Term Desc	Fall 2018		Fall 2019		Fall 2020	
Ethnicity (9)	Students	% of Total	Students	% of Total	Students	% of Total
African American/Black	1	1.82%	3	5.00%	5	8.20%
American Indian/Alaskan Native	1	1.82%	2	3.33%	2	3.28%
Asian	7	12.73%	6	10.00%	7	11.48%
Hispanic/Latino	16	29.09%	19	31.67%	28	45.90%
Middle Eastern			1	1.67%	1	1.64%
Other/Unknown	1	1.82%			1	1.64%
Two or more	5	9.09%	5	8.33%		
White	24	43.64%	24	40.00%	17	27.87%
Total	**55**	**100.00%**	**60**	**100.00%**	**61**	**100.00%**

Gender by Term - Count of Students

Term Desc	Fall 2018		Fall 2019		Fall 2020	
Gender Desc	Students	% of Total	Students	% of Total	Students	% of Total
Female	35	63.64%	35	58.33%	40	65.57%
Male	20	36.36%	25	41.67%	21	34.43%
Total	**55**	**100.00%**	**60**	**100.00%**	**61**	**100.00%**

Age Band by Term - Count of Students

Term Desc	Fall 2018		Fall 2019		Fall 2020	
Student Age at Snapshot - Band4	Students	% of Total	Students	% of Total	Students	% of Total
21-24	13	23.64%	15	25.00%	13	21.31%
25-29	16	29.09%	15	25.00%	18	29.51%
30-39	19	34.55%	20	33.33%	21	34.43%
40+	7	12.73%	10	16.67%	9	14.75%
Total	**55**	**100.00%**	**60**	**100.00%**	**61**	**100.00%**

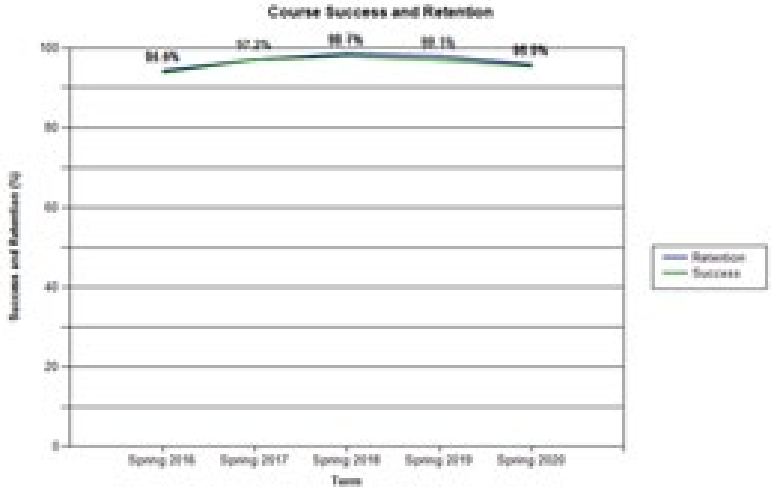
Appendix 3. Student Retention and Success Data

College 5-YR Averages: Success 69% and Retention 84%

College Targets: Success 75% and Retention 85%

All Students: Fall

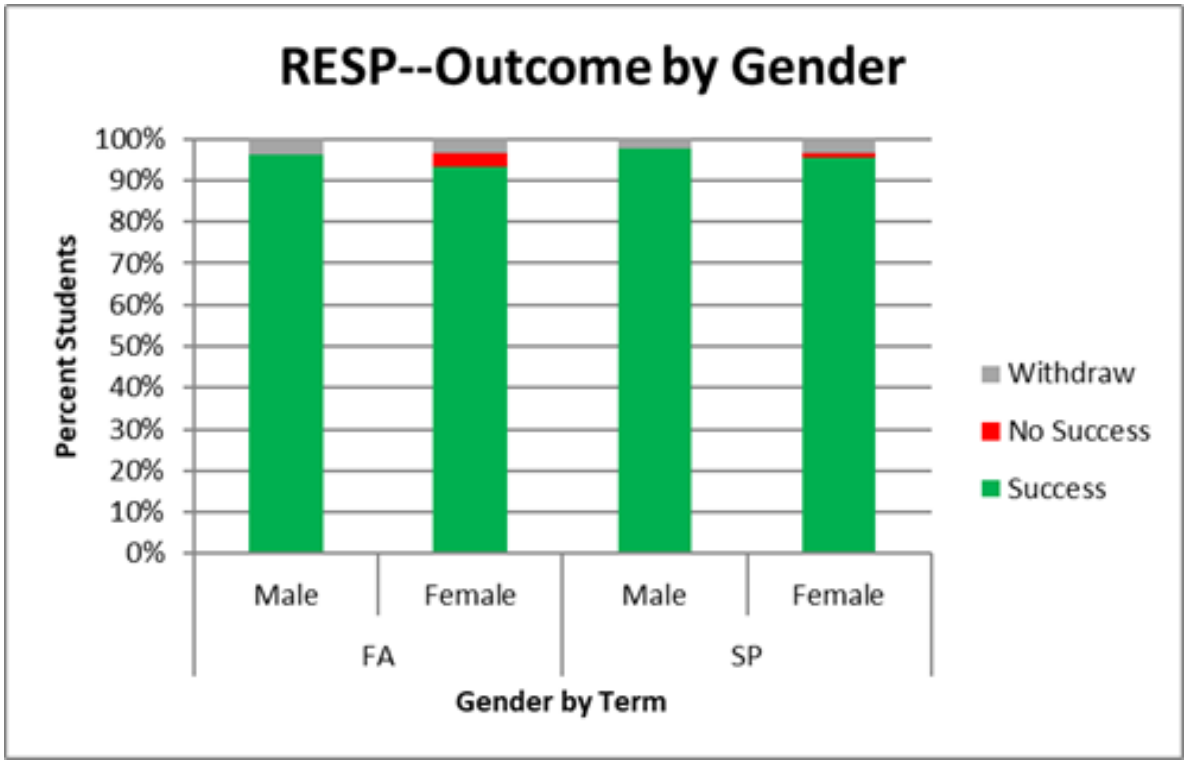
All Students: Spring

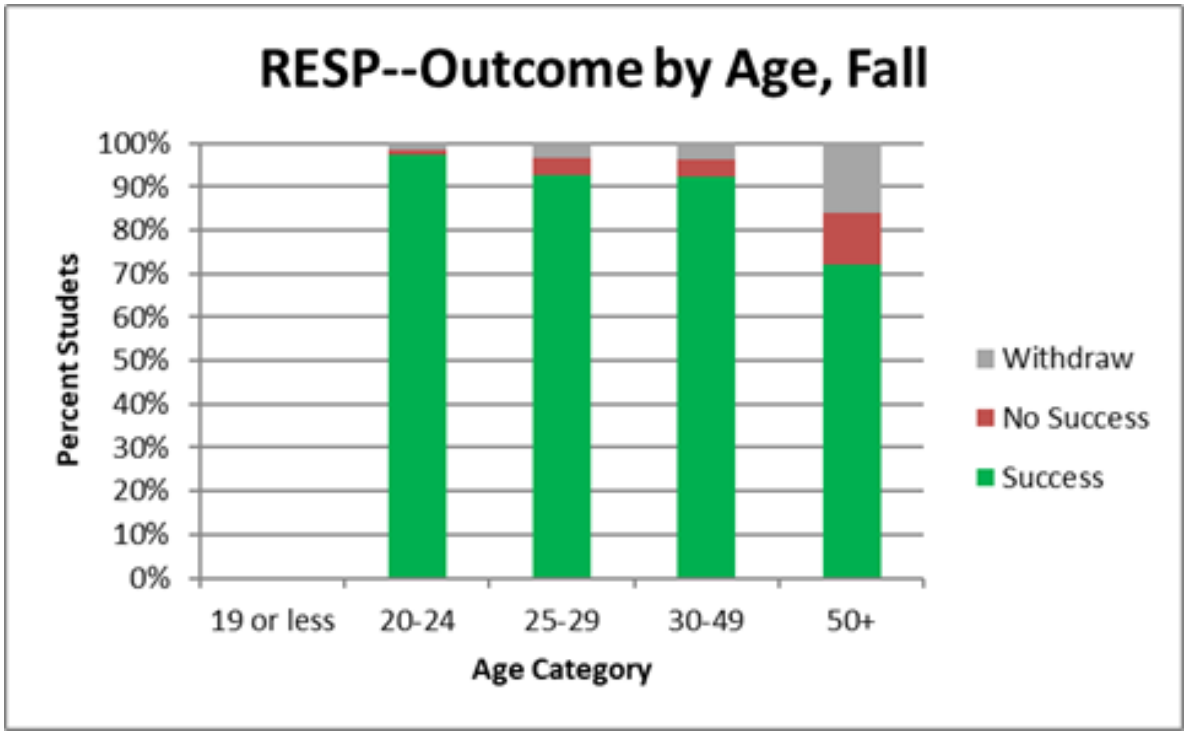


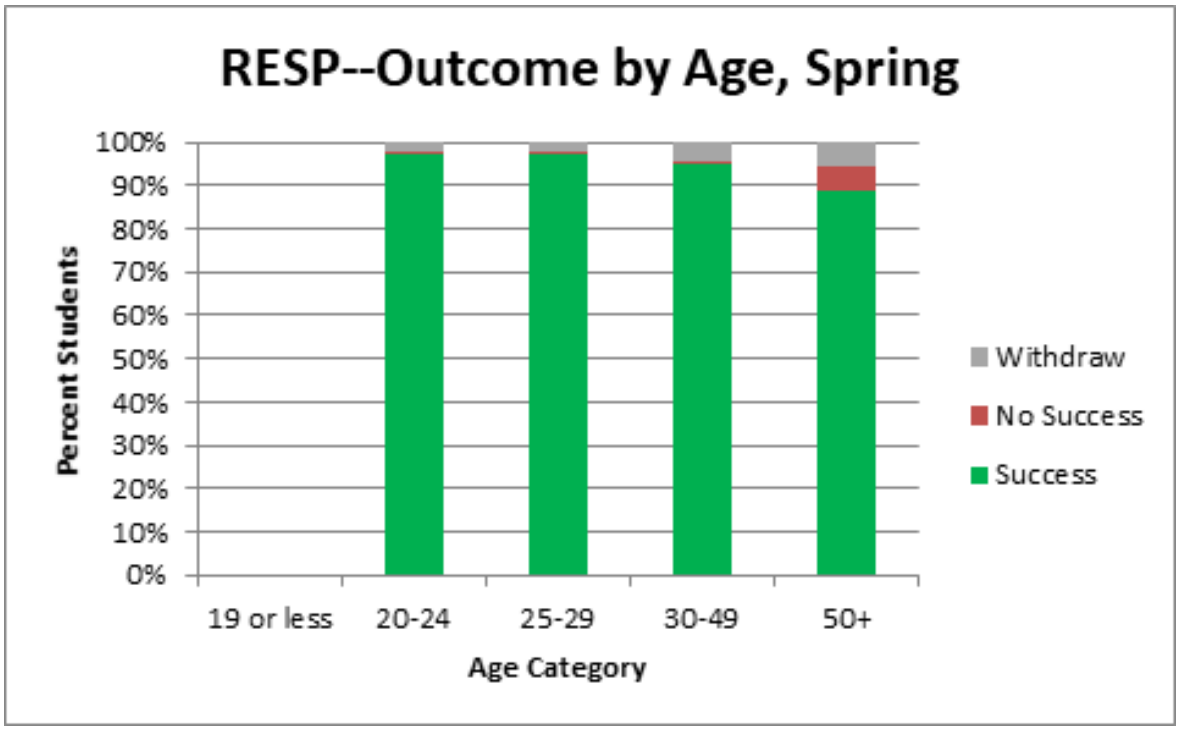
All Students: Summer

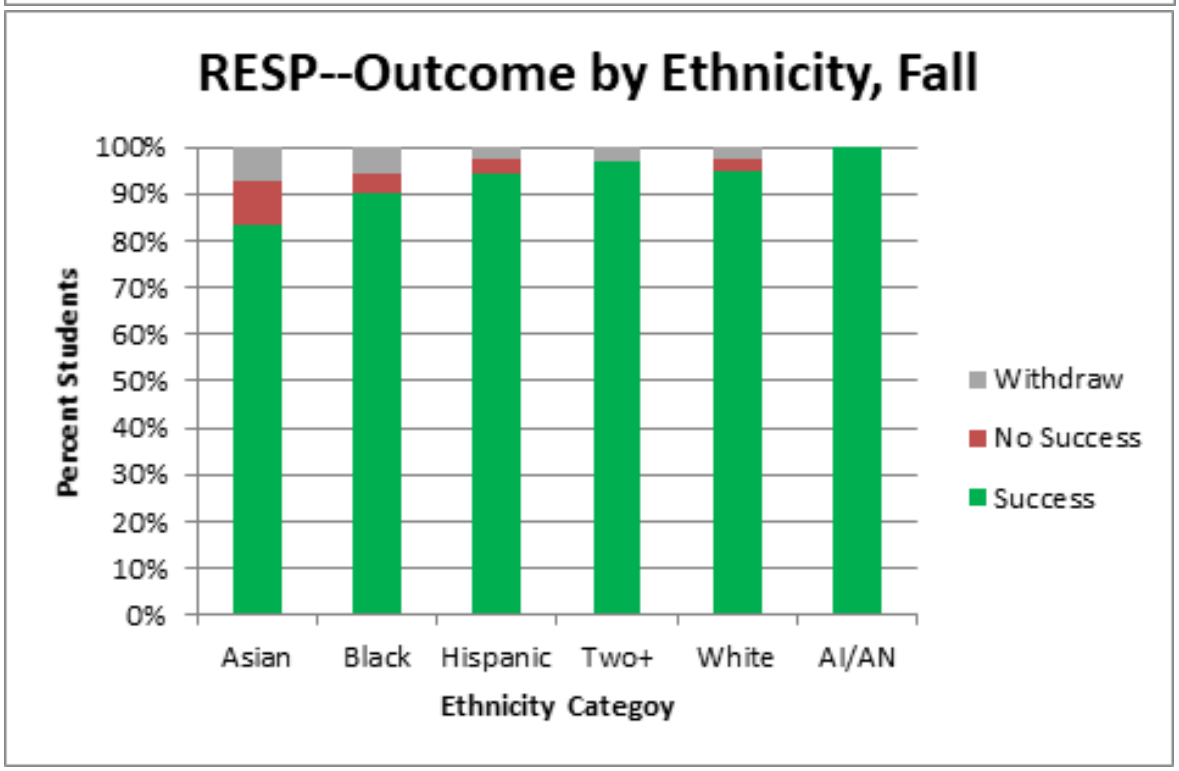

Course Success and Retention
100.0%
100.0%
100.0%
100
80
60
40
20
0
Success and Retention (%)
Summer 2017
Summer 2018
Summer 2019
Term
Retention
Success

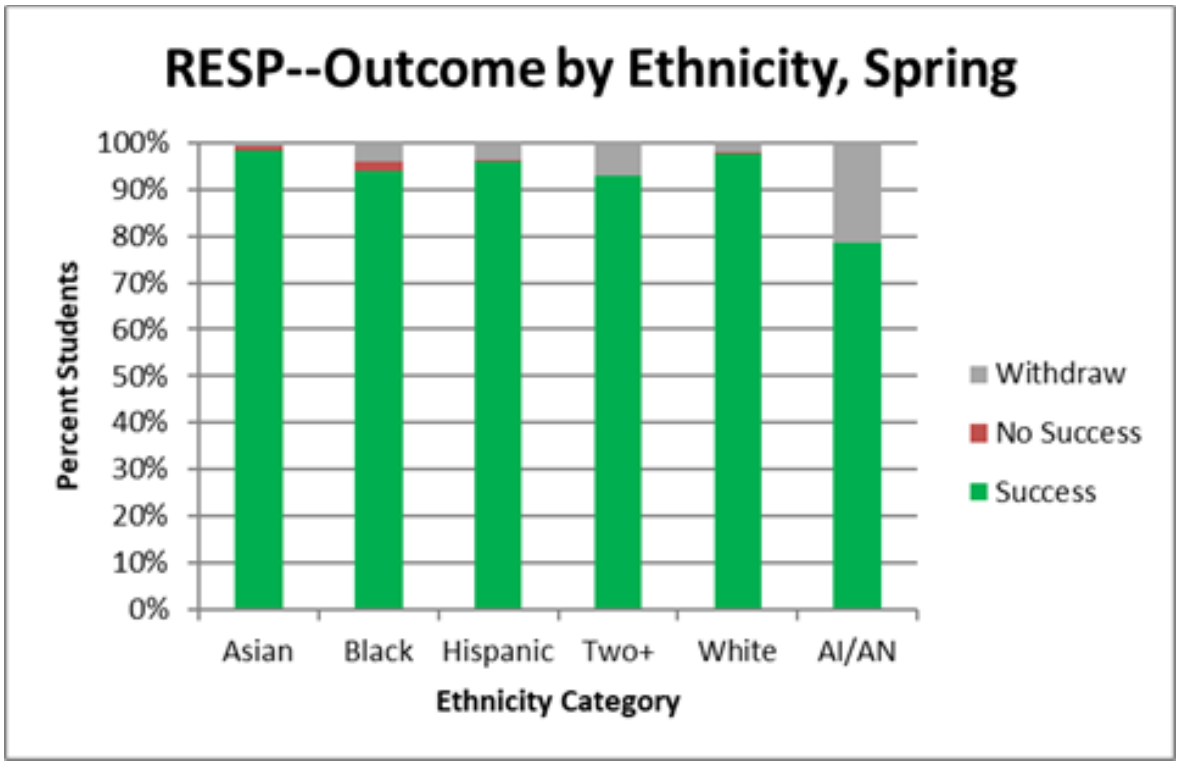
Student Success & Retention, Disaggregated






RESP--Outcome by Age, Spring
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Percent Students
19 or less
20-24
25-29
30-49
50+
Age Category
Withdraw
No Success
Success


RESP--Outcome by Ethnicity, Fall
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Percent Students
Asian
Black
Hispanic
Two+
White
AI/AN
Ethnicity Categoy
Withdraw
No Success
Success



Other ethnic categories are not shown since sample size is too small.

Appendix 4- SLO, Instructional Operations, Articulation Officer, Library

Email from SLO Coordinator

Re: Program Review Data

Felicia Kalker <felicia.kalker@gcccd.edu>
Thu 3/18/2021 10:30 AM
To: Carey Flores <Carey.Flores@gcccd.edu>

1 attachments (174 KB)
SLO Report -RESPSP21.pdf;

Hi Carey,
Yes! The Respiratory Therapy program is current with Course SLOs. You can see up to date assessments from last semester, and all assessments on all course SLOs, in the report attached.
I believe that you are also current with Program-level outcomes.

One thing the department should work on this semester is updating the schedule of assessments (formerly known as the "six year plan") which expires this year. At the recent SLO Meetup (https://tinyurl.com/SP21-LiaisonsMeetup) I shared some Approaches to revising this course assessment schedule. Please let me know if you have any questions or if I can help in any way! :)

Thank you,
Felicia Kalker
your friendly SLO Coordinator

SLO Cycle Data

Course	Due Date	Column1		Course	Due Date	Column1
105	2022	Fall		220	2021	Spring
108	2022	Fall		268	2021	Spring
112	2023	Fall		114	2021	Fall
114	2021	Fall		220	2021	Spring
116	2022	Spring		108	2022	Fall
118	2022	Spring		116	2022	Spring
122	2023	Spring		118	2022	Spring
150	2023	Spring		105	2022	Fall
200	2023	Fall		150	2023	Spring
201	2023	Fall		112	2023	Fall
202	2023	Fall		122	2023	Spring
205	2024	Spring		201	2023	Fall
208	2026	Fall		200	2023	Fall
220	2021	Spring		202	2023	Fall
220	2021	Spring		205	2024	Spring
222	2026	Fall		232	2024	Spring
232	2024	Spring		208	2026	Fall
268	2021	Spring		222	2026	Fall

Letter from Articulation Officer

Date: March 22, 2021

To: Carey Flores, Department Faculty

From: M. Denise Aceves, Articulation Officer

Re: Respiratory Therapy Assistant • Program Review Checklist

The process of articulation is two-fold. First, transferability must be established. A transferable course is one that is taken at a community college and can be used for unit credit at a university. The next step is the articulation of courses deemed transferrable. Articulation is the formal, written agreement that identifies courses on a "sending" campus that are comparable or acceptable in lieu of specific course requirements at a "receiving" campus. Thus, articulation identifies courses that a student should take at community college to meet university degree requirements.

In response to your request for articulation information, in Respiratory Therapy, all courses are transferable to the California State University with the exception of RT 270. Any student who successfully completes these courses, can use the units as elective credit. Due to the nature of Respiratory Therapy, there are no current course-to-course articulation with CSUs or UCs. Consequently, the courses in RT are satisfactorily articulated.

The CSU transferability designations are notated at the end of each course description in the Grossmont College Catalog. The courses with CSU transferability will appear on the CSU transferability list that can be found on *ASSIST.org*. **Once ASSIST is fully operational, the department is encouraged to review the transferability list on *ASSIST.org* and work with me, the Articulation Officer, to correct any inconsistencies**.

Articulation is facilitated with current, concise and thorough course outlines. It is imperative that the outlines and textbooks listed be current. **The requirement that course outlines be updated every 5 years through the Grossmont College Curriculum process is vital.** Below I have listed the link to *The Course Outline of Record: A Curriculum Reference Guide Revisited*, a document adopted by the Academic Senate for California Community Colleges in Spring 2017, as well as the latest standards for CSU GE Breadth and IGETC.

Curriculum Resources

- **The Course Outline of Record: A Curriculum Reference Guide Revisited**
- **Guiding Notes for General Education Course Reviewers**
-

You are welcome to contact me directly at mariadenise.aceves@gcccd.edu with any questions regarding this report.

M. Denise Aceves, MA Ed, MSW
Assistant Professor
Curriculum Co-Chair
Articulation Officer & Counselor
Grossmont College
8800 Grossmont College Drive
El Cajon, CA 92020

Library Resources

Your library program review

Pat Morrison <Pat.Morrison@gcccd.edu>

Tue 3/23/2021 3:30 PM

To: Carey Flores <Carey.Flores@gcccd.edu>
Cc: Peggy Wells <Peggy.Wells@gcccd.edu>; Julie Middlemas <Julie.Middlemas@gcccd.edu>; Pat Morrison <Pat.Morrison@gcccd.edu>

Library Resources for Respiratory Therapy, 2021

Books
The library Respiratory Therapy area, call numbers RC 705 – 779, contains 173 items; 113 electronic books and 30 print books. Additionally, the library owns 30 journals on Respiratory Therapy.

Books are purchased using a complex allocation formula to ensure that departments get their "fair share" of this year's 20/21 $43,000.00 library book budget. The allocation allows for a book budget of $268.55 in Respiratory Therapy for 2020/21. At this time, the library has spent $971.65 for RT books.

There are also two online reference book collections that contain thousands of entries about Respiratory Therapy. These collections, or databases, are called "Gale Virtual Reference Library" and "Credo."

All electronic materials, whether books or journal articles, can be accessed anytime, anywhere.

Periodicals
Most of the Respiratory Therapy periodicals are in electronic format, within library periodical databases. This allows for keyword searching, and anytime, anywhere access. There are over 13 databases that cover Respiratory Therapy topics, leading to tens of thousands of articles.

Two of the best subject-specific databases for Respiratory Therapy are *CINAHL Complete* and *Medline*. In addition, the library also subscribes to a number of multidisciplinary databases, including *Academic Search Premier* and *Gale OneFile*, with access to many more articles in our subject area.

DVDs, Media
The library has a strong collection of databases of videos. *Nursing Education in Video* is particularly useful.

Reserves/textbooks
We have 5 textbooks on reserve at this time.

Patricia Morrison
Librarian
Grossmont College Library

Letter from Instructional Operations

Re: Program Review Requirement - Respiratory Therapy

Krista Ames-Cook
To Carey Flores

You replied to this message on 3/18/2021 11:16 AM.
If there are problems with how this message is displayed, click here to view it in a web browser.

Hi Carey,

Thank you for your email. For your program review task, here is the information you are seeking from the list of **Course Outlines Approved by the Governing Board as of December 2020**:

Subject and No.	Governing Board Approval Date
RESP 105	May 2019
RESP 108	May 2019
RESP 112	May 2019
RESP 114	May 2019
RESP 116	May 2019
RESP 118	May 2019
RESP 122	May 2019
RESP 150	May 2019
RESP 200 ABC	May 2019
RESP 201	May 2019
RESP 202 ABC	May 2019
RESP 205	May 2019
RESP 208	May 2019
RESP 220	May 2019
RESP 222	May 2019
RESP 232	May 2019
RESP 268	May 2019
RESP 270	May 2014

The full list can be found in the link shared above.

Let me know if you have any questions.

Thank you,
Krista

Krista Ames-Cook, *MA Ed.*
Interim Supervisor
Instructional Operations (IOPS)
Grossmont College
Phone: 619-644-7153
Krista.Ames-Cook@gcccd.edu

Appendix 5- TMC and CSE NBRC Exam Pass Rates

TMC School Summary

GROSSMONT COLLEGE - 200085

06/01/2018 through 06/01/2019

Low Cut:

All Candidate Summary		Program Pass %	National Pass %	% of National
Total	36	80.56%	61.19%	131.65%
Passing	29			
Failing	7			

New Candidate Summary		Program Pass %	National Pass %	% of National
Total	23	86.96%	79.67%	109.14%
Passing	20			
Failing	3			

Repeat Candidate Summary		Program Pass %	National Pass %	% of National
Total	13	69.23%	45.01%	153.82%
Passing	9			
Failing	4			

High Cut:

All Candidate Summary		Program Pass %	National Pass %	% of National
Total	36	66.67%	46.34%	143.86%
Passing	24			
Failing	12			

New Candidate Summary		Program Pass %	National Pass %	% of National
Total	23	82.61%	69.85%	118.26%
Passing	19			
Failing	4			

Repeat Candidate Summary		Program Pass %	National Pass %	% of National
Total	13	38.46%	25.74%	149.44%
Passing	5			
Failing	8			

TMC School Summary

GROSSMONT COLLEGE - 200085

06/01/2019 through 06/01/2020

Low Cut:

All Candidate Summary		Program Pass %	National Pass %	% of National
Total	34	85.29%	60.64%	140.65%
Passing	29			
Failing	5			

New Candidate Summary		Program Pass %	National Pass %	% of National
Total	24	79.17%	77.87%	101.66%
Passing	19			
Failing	5			

Repeat Candidate Summary		Program Pass %	National Pass %	% of National
Total	10	100.00%	45.55%	219.52%
Passing	10			
Failing	0			

High Cut:

All Candidate Summary		Program Pass %	National Pass %	% of National
Total	34	67.65%	45.78%	147.76%
Passing	23			
Failing	11			

New Candidate Summary		Program Pass %	National Pass %	% of National
Total	24	62.50%	67.53%	92.55%
Passing	15			
Failing	9			

Repeat Candidate Summary		Program Pass %	National Pass %	% of National
Total	10	80.00%	26.72%	299.41%
Passing	8			
Failing	2			

TMC School Summary

GROSSMONT COLLEGE - 200085

06/01/2020 through 03/22/2021

Low Cut:

All Candidate Summary		Program Pass %	National Pass %	% of National
Total	37	86.49%	64.13%	134.85%
Passing	32			
Failing	5			

New Candidate Summary		Program Pass %	National Pass %	% of National
Total	26	96.15%	76.75%	125.28%
Passing	25			
Failing	1			

Repeat Candidate Summary		Program Pass %	National Pass %	% of National
Total	11	63.64%	49.76%	127.89%
Passing	7			
Failing	4			

High Cut:

All Candidate Summary		Program Pass %	National Pass %	% of National
Total	37	78.38%	50.23%	156.04%
Passing	29			
Failing	8			

New Candidate Summary		Program Pass %	National Pass %	% of National
Total	26	88.46%	66.57%	132.89%
Passing	23			
Failing	3			

Repeat Candidate Summary		Program Pass %	National Pass %	% of National
Total	11	54.55%	31.61%	172.58%
Passing	6			
Failing	5			

CSE School Summary

GROSSMONT COLLEGE - 200085

06/01/2017 through 06/01/2018

All Candidate Summary		Program Pass %	National Pass %	% of National
Total	37	51.35%	53.50%	95.98%
Passing	19			
Failing	18			

New Candidate Summary		Program Pass %	National Pass %	% of National
Total	19	52.63%	59.87%	87.90%
Passing	10			
Failing	9			

Repeat Candidate Summary		Program Pass %	National Pass %	% of National
Total	18	50.00%	46.26%	108.08%
Passing	9			
Failing	9			

CSE School Summary

GROSSMONT COLLEGE - 200085

06/01/2018 through 06/01/2019

All Candidate Summary		Program Pass %	National Pass %	% of National
Total	50	52.00%	55.28%	94.06%
Passing	26			
Failing	24			

New Candidate Summary		Program Pass %	National Pass %	% of National
Total	24	58.33%	61.45%	94.93%
Passing	14			
Failing	10			

Repeat Candidate Summary		Program Pass %	National Pass %	% of National
Total	26	46.15%	48.15%	95.86%
Passing	12			
Failing	14			

CSE School Summary

GROSSMONT COLLEGE - 200085

06/01/2019 through 06/01/2020

All Candidate Summary		Program Pass %	National Pass %	% of National
Total	38	52.63%	59.64%	88.24%
Passing	20			
Failing	18			

New Candidate Summary		Program Pass %	National Pass %	% of National
Total	20	30.00%	64.23%	46.71%
Passing	6			
Failing	14			

Repeat Candidate Summary		Program Pass %	National Pass %	% of National
Total	18	77.78%	53.24%	146.08%
Passing	14			
Failing	4			

CSE School Summary

GROSSMONT COLLEGE - 200085

06/01/2020 through 06/01/2021

All Candidate Summary		Program Pass %	National Pass %	% of National
Total	41	70.73%	60.81%	116.32%
Passing	29			
Failing	12			

New Candidate Summary		Program Pass %	National Pass %	% of National
Total	27	66.67%	65.66%	101.54%
Passing	18			
Failing	9			

Repeat Candidate Summary		Program Pass %	National Pass %	% of National
Total	14	78.57%	52.62%	149.31%
Passing	11			
Failing	3			

Annual School Summary

Report as of 3/22/2021

GROSSMONT COLLEGE - 200085

Exam: TMC - Low Cut

Graduation Year	Graduates Tested	Total	Passing %	Passing	First Time %	Passing	Repeaters %
2018	21	21	100%	19	90.5%	2	9.5%
2019	19	19	100%	15	78.9%	4	21.1%
2020	28	28	100%	25	89.3%	3	10.7%

Exam: TMC - High Cut

Graduation Year	Graduates Tested	Total	Passing %	Passing	First Time %	Passing	Repeaters %
2018	21	20	95.2%	18	85.7%	2	9.5%
2019	19	19	100%	13	68.4%	6	31.6%
2020	28	28	100%	23	82.1%	5	17.9%

Exam: CSE

Graduation Year	Graduates Tested	Total	Passing %	Passing	First Time %	Passing	Repeaters %
2018	20	20	100%	11	55%	9	45%
2019	19	19	100%	6	31.6%	13	68.4%
2020	27	27	100%	18	66.7%	9	33.3%

GRADUATION YEAR	CRT	RRT
2018	21	20
2019	19	19
2020	28	27

Section/Page	Question	Response
1.2	What course was RESP 270 and why was it deleted?	RESP 270 is a comprehensive review course to help students prepare for their professional board exams that was offered as an optional course for students in their 4th semester of the GC RT Program. It will be offered again in the Spring 2022 semester. It was deleted due to budget as it is an optional course and therefore had low attendance and high attrition. We are completing forms to reinstate the course with the Deans approval and considering opening it up to other graduates and respiratory care practitioners in the community to increase enrollment. Occasionally, the Program Director receives emails from those who want assistance studying or reviewing for both the Therapist Multiple Choice exam and the Clinical Simulation Exam which are the board exam that are now required to obtain credentials as a Registered Respiratory Therapist (RRT) which is a necessary credential to work in the state of California.
2.1	What was the initial purpose of RESP 270? Was it ever part of the core curriculum?	RESP 270 is a review course to help students prepare for their professional exams. It was deleted due to budget, low enrollment, and high attrition as it is an optional course.
3.1	Can you give us two or three examples of changes you made to SLOs during your review? How long did it take to complete your comprehensive review of all classes?	The review of all courses was completed over several months. Full-time faculty met on several occasions to discuss courses SLOs for all courses in the Respiratory Therapy Program as each course is interrelated with all other courses. SLOs were changed to be a better reflection of what students learn in the courses within the RT Program. SLOs where student learning fell below the desired threshold were analyzed and either course content changed, the methods of instruction changed, or the SLO was changed to accurately depict what student should be able to learn when taking a class. The SLOs were

		changed to reflect the skills that students learn in courses where competencies and clinical care of patients is assessed, and to use verbs that can be measurable and are inclusive of the information offered in the course. The faculty compared lower level courses taken in first and second semester and considered and changed SLOs so that a growth can be measured in student performance as students progress to higher level, more challenging courses throughout their time in the program. Example 1: In RESP 108, students learn about equipment used by respiratory therapists, such as oxygen delivery devices and medication delivery devices like nebulizers. During the course, students learn about the types of patients that might benefit from the use of these therapies and treatments and are assessed about their knowledge of when it is appropriate to recommend these courses of care using written patient scenarios or case studies. During one of the reviews SLO cycles, students fell below the threshold about the care of patients when given a written patient scenario on an exam. The two instructors for the course analyzed the data, the SLO, the course materials, curriculum, and methods of instruction. The SLO was updated to better align with the course content, additional reiteration of important concepts was added to the course, and the SLO re-assessed. Example 2: The RESP 150 course catalog description and SLOs were changed to align better with the course content, with one another, and to accurately reflect what students should learn when enrolled in this course. The Commission on Accreditation for Respiratory Care schools (CoARC) requires students to learn about both the neonatal and pediatric populations before entry into practice in

		the field of respiratory care. Although information about both patient populations was taught in the RESP150 course, the SLOs and the catalog statement needed to reflect that the course covered both. The catalog statement describing this course now reads: “This course is designed to familiarize the respiratory therapy student with the knowledge necessary to care for pediatric and neonatal patient populations. Pediatric, infant, and neonatal physiology, pathophysiology, clinical manifestations, management and treatment in acute and critical care are emphasized.” The wording of the course objectives was sent to curriculum for review and approval to include or alter verbs that can be measured or assessed by the instructor in writing. For example, one of the course objectives stated, “Judge assessment and monitoring techniques utilized with neonates.” This objective now reads, “Chose age-appropriate assessment and monitoring techniques for use in pediatric, infant and neonate patients.” To align the course catalog description, the official course outline, and the objectives of the course and the course content and materials, the SLO used to read, “Upon completion of this course, our students will be able to do the following: Recommend appropriate respiratory care techniques for neonates with varying dysfunctions or disorders given a patient scenario.” This SLO now reads, “Upon completion of this course, our students will be able to do the following: Recommend appropriate respiratory care techniques for pediatric and neonate patients with varying dysfunctions or disorders.”
4.2	Re: Building 34 Computer Labs-why can’t the specialized software be installed on a set of computers in the TLC? Has a request	In the past we were told by IT that the program can only be installed on one system. We chose the computer lab in building 34 for easy access during class periods. Yes, we have explored extending computer lab hours but do not have available staff to monitor the computer space after the 2 Lab Technicians leave for the day around 1600-1700. During the pandemic, students were not allowed

	been made to extend the open hours of the Bldg 34 lab?	to use the computer lab in building 34, therefore, some of the efforts to extend Lab Technician hours have been postponed until students can use this learning space again.
4.3	How successful has TBL been in the online Zoom environment? Commute time: Why aren't labs scheduled on a different day than the synchronous lectures?	Portions of TBL continue to work well in the on-line environment. Systematic communication using medical terminology is an important component of learning when students are being prepared to work in the medical field as poor teamwork and/or communication can lead to medical errors and harm patients. Student interaction is increased and students can work on their communication skills during breakout sessions and when discussing the findings for their groups after participating in breakout sessions. During these sessions students work with one another to complete assignments and team exercises that require critical thinking. Team scores are typically increased compared to individual scores on quizzes. This teaches students the benefits of working as a team. Some things, for example, group quizzes do not work as well in the online setting. We continue to require study before class and then have students work in groups during class completing activities that reinforce the assignment. The students learn quickly that they are not as successful if they are not prepared. Group peer pressure also helps students find the time to be prepared for group work that must be submitted by the end of the day of the class. Labs and lectures are scheduled around our clinical courses. 2nd year clinical classes are 12 hours long. Therefore, it is not feasible to schedule lecture classes on these days. Clinical sites request specific days that they accept students to learn at their facilities. Having clinical courses scheduled several days per week for a specific cohort of students, limits the days that classes on campus and lecture courses can be offered. For example, students last semester in their 2nd semester in the RT

		Program attended two lecture courses during the semester, RESP 116 and RESP 150. They also attended a class that has both a lecture and lab section, RESP 118, and a nine hour per day clinical course one day per week. Because CoARC has restrictions stating that only up to 6 students may attend a clinical site at one time and hospitals have additional restrictions, the students participated in their clinical learning on one of three days of the week, Tuesday, Thursday, or Saturday. The lab/lecture RESP 118 course was held on Mondays, Wednesdays, and Fridays with lecture in the morning followed by students coming to campus after lecture. RESP150, an online lecture course was held Thursday mornings, and another online lecture course, RESP116 held on Fridays through Zoom.
4.4	Given the need for live streaming between classrooms, are there COVID Relief funds available to update computers?	The cost of this repair was estimated and found to be costly. The department is in the process of finding out if Covid funds could cover the cost.
4.6	Are tutors only needed for lab classes? Have you considered allowing tutors to have a Zoom schedule for more accessibility? How are instructors “ensuring tutor hours are being used wisely and equal access is assured”?	Tutors help in the lab classes and are available via zoom for all of the courses. A Canvas course accessible to all students in a cohort was implemented starting with the class of 2022 that started the RT Program in the Fall 2020. This was done to have an online format for orientation to the program and is also used for tutors to offer/hold zoom session tutoring available to all students within a cohort. Tutors also hold open lab times at various times per week, including morning and afternoon sessions. Students' complete surveys to evaluate the tutoring services. Equal access is not easily defined. All students have the contact information of the tutors and are instructed on how to sign up for tutoring. Students that have more outside responsibilities and simply do not have any extra hours in the day may not be able to schedule tutoring

		sessions. Instructors monitor the digital sign-up forms and sign-in forms that students use to attend both online tutoring and open lab hours. Sessions with less than 2 sign-ups are cancelled 24 hours in advance and all students notified through the Announcements feature in the cohort Canvas course. Students frequently give verbal feedback to the faculty about tutor availability and assistance besides filling out surveys about the tutoring services once per semester throughout the RT Program.
5.1	Are there efforts you can make to increase enrollment from underrepresented groups?	The full-time faculty and Program Director hold monthly or bi-monthly Program Previews to promote the program and answer questions for students who might be interested in applying. The full-time faculty in previous years prior to the pandemic promoted the RT Program by going to science classes, such as biology, microbiology, anatomy, and physiology courses to hand out flyers and answer student questions. Students within the program have made videos that are available on YouTube. Caution is taken to make sure that marketing materials have representations from diverse populations in ethnicities, age, sexual orientation and preference, etc. The Program Director typically visits local high school fairs to promote the program. Students participate in information and health screening booths at local shopping malls and work closely with the ALA (American Lung Association) to provide community service and promote the profession and the program. Most of these efforts have been on hold since COVID. (PW)
7.0	Have any of your faculty been involved with professional development in the area of student equity (beyond the on-campus discussions)?	The Program Director attended Lasana Hotep: It's in the Syllabus and made several changes to the department syllabus. One of the full-time faculty members, Carey Flores, applied to be on the Student Success and Equity Committee. The committee accepted other applicants to participate. She has also taken two college courses within the last two years,

		one course about intersectionality and citizenship, and another on multicultural human relations with the focus on equity.
8.1	There's text in another color in this section. Is this finalized? Do you need to make changes here?	This section has been edited. Please let me know if the color change still appears.
9.3	More text of a different color present. Do you need to edit this content?	This section has been edited. Please let me know if the color change still appears.

GROSSMONT COLLEGE
FALL 2021 **Respiratory Therapy**

PROGRAM REVIEW COMMITTEE
SUMMARY EVALUATION

The committee recommends maintaining this program. Following are the committee's specific commendations and recommendations.

The Program Review Committee commends the department for:

1. Great use of engaging activities such as the flipped classroom and "red blood cells" activity.
2. Incorporating topics of the curricula to help support the community through volunteer work
3. Very thorough SLO and PSLO review process. Impressive!
4. For activities that go beyond the CE requirements needed for certification, such as interdisciplinary learning activities, networking with community members who become guest speakers, and demonstrating the importance of community service and international involvement by your own example
5. For continuing a tradition of quality and excellence demonstrated by a 2-year waitlist attesting to the reputation and success of the program
6. Comprehensive and detailed goals for next 6-year cycle

Committee recommends the following:

1. Continue the excellent work you are doing. Consider sharing some during professional development week.

_____	_____	_____
College President	Program or Department Chair	Academic Program Review Chair

RESPIRATORY THERAPY

Academic Year	Fall		Spring	
	% Fill	WSCH/FTEF	% Fill	WSCH/FTEF
2015-16	106.3	153.7	104.0	119.8
2016-17	100.0	144.2	95.2	111.6
2017-18	97.9	163.5	110.0	116.7
2018-19	70.3	165.0	94.1	130.7
2019-20	93.0	142.7	90.3	110.8