

Health Sciences Division Program Review Summary
December 10, 2013
Dr. Karen Cowell, Dean, Health Sciences & Technical Education

The Health Sciences Division had an annual unduplicated headcount of 1959 in 2012-13, representing a decline of 11% since the state and college budget reductions that began in 2009-10. Another factor in the decline of the headcount has been the reduction of state grant support for the expansion of the associate degree nursing program. Sections during summer were cut by 50% and sections offered annually decreased by 15.8%. The largest annual decrease in sections occurred in Nursing Science (44.4% decrease) and EMT (29.3% decrease) while Nutrition and Foods had a 8.4% increase in sections. FTES for summer terms declined by 40% between 2009-10 and 2012-13. FTES also declined in fall terms, but not significantly in intersession and spring terms. The percent of full time students has varied from term to term and year to year.

Significantly, in the past four years the annual section count in Palmdale increased from 13 to 20 (peak of 27 in 2010-11) as the Child and Family Education discipline offered more classes in locations that are considered part of the Palmdale Center service area. Offering CFE classes in Palmdale has been a challenge because of limited space at the center. The number of online sections remained stable. The part-time to full-time instructor ratio was consistently below the District's ratio.

Student success by ethnicity has remained above the college standard. Hispanic students' success rate has averaged 78% in the past four years and non-Hispanic students' success rate has averaged 75%. Student success of females and males exceeded the District averages every year of the past four years. Success has been highest in the Asian and Pacific Islander student groups and lowest in the African American student group. The African American student success rate lags the Asian student success rate by 26 to 30%.

Student success in division classes at the Palmdale Center lagged student success on the Lancaster campus by ten to thirteen percent. Faculty note that students at the Palmdale Center lack basic skills to work at the college level. Students who took traditional classes in division disciplines are more successful than students who took online classes. The gap between success of students in traditional classes and online classes has remained fairly stable at around 11-12% in the past two year and has declined since 2009-10.

Student retention is high in the health sciences classes. The average retention for Hispanic and non-Hispanic students is above 90% for all years except 2012-13. Retention of female students and male students is nearly equal and above 90% except for 2012-13, a year in which retention of students of both female and male students dipped to 88 and 86%. When examined by race, retention of African American students lagged retention of Asian and white students by 14 to 18%. Pacific Islanders' retention lagged the highest groups retained by approximately 20% in the past two years. Fall-to-spring persistence has hovered around 75%, while spring-to-fall persistence has consistently hovered around 65% in the past four years.

The number of degrees awarded in division disciplines declined over the past four years. Two factors have contributed to the decline. First, students found it difficult to enroll in classes to complete their degrees when classes were reduced due to the budget shortfall. Secondly, grants supporting nursing enrollment were reduced and the number of students enrolled in the program were reduced in 2009. Still the division disciplines accounted for approximately 20% of degrees awarded from 2010-2013 with the majority of the division's degrees awarded in Registered Nursing. The number of degrees awarded in Child and Family Education dropped by over 50% in 2012-13. The number of certificates awarded in division disciplines remained fairly stable at about 40 per year in the past four years.

In the faculty's discipline program reviews the ever-increasing cost of supplies and the concomitant decline in supply budgets has been noted as a factor in student success. Faculty has been frugal with supply funding and has used Perkins funding, grant funding for associate degree nursing, and Prop 20 funds to supplement the meager District supply budgets. To modernize equipment the discipline faculty has benefited from awards from Perkins funding. Nursing grants end in 2014, and it is expected that the students will not have access to the outstanding equipment for simulation in the future unless other state funding for high cost programs becomes available.

The division faculty's top priorities for full-time faculty positions is related to the desire for full-time faculty leadership in disciplines that have none (Medical Office Assisting) and the need for leadership in Palmdale for degree in Child and Family Education and a full-time Radiologic Technology instructor so the program meets the only two accreditation standards that it did not meet in the August 2013 accreditation visit.. The faculty also note that the success of associate degree nursing students is related to access to a Student Success Advisor, a position that had been funded by categorical funds for a number of years. Other positions that were noted in the discipline program reviews: Simulation lab coordinator (100% position that does not have a job description), Early Childhood Support Specialist Coordinator (CDC), Infant/Toddler teacher (if the Infant/Toddler program is reinstated), Child and Family Education faculty (2), Grant Coordinator for the CDWFI grant, faculty to assist the MOA faculty in skills testing, and adjunct faculty for several disciplines.

As most health sciences programs are housed in the high tech Health and Sciences Building, physical resource needs are not the highest priority for most division faculty. The glaring exception to this is the lack of ability to lock and unlock the electronic system in the new building, a concern in case of campus lockdown. In addition, the new building does not have electrical outlets that function so students and faculty can plug in to outlets in the floors of the building and cell phone service is spotty throughout the building. Confidential conversations can be heard through the thin walls between faculty offices. The Child Development Center would like to reinstate the Infant/Toddler program which may require renovation or expansion of the center. Carpeting, flooring, cabinets, and refrigerator/freezer replacement are also in order for the CDC. Child and Family Education faculty note the need for a dedicated demonstration lab. The Radiologic Technology program notes the need for maintenance agreements for expensive equipment so that the potential cost of repairs does not exceed the actual cost of the current equipment.

The Palmdale Center will require child care for students' children in the future, as noted in the CDC program review. The CFE discipline will be one of the first to offer a degree in Palmdale and will need dedicated space for the program, including classroom and lab space, office space, and counseling space. The need for dedicated space for the Office for Students with Disabilities and tutoring was noted as well.

Information technology needs related to the expansion of wireless computing technology throughout the campus. This is an important concern of the Child Development Center teachers and directors, as children are being exposed to the use of technology for learning at an early age. The CFE faculty notes the need for a document camera, laptops, printers and locked storage for technology.

Professional development needs are critical to the success of instructors, and therefore, essential to student success. Perkins funding is currently the only source of professional development funds for health sciences instructors. It is important for all health sciences faculty to be able to implement innovations in their fields into the curriculum so that students remain employable. Specifically noted by faculty was the need for training in online teaching, accreditation procedures, licensure exam success and using simulation as a teaching modality. The CDC staff needs to attend State conferences and workshops addressing the state preschools topics.

Comprehensive Program Review Self-Study Report

Division/Area Name Health Sciences/Associate Degree Nursing

Year 2013-2014

Part 1 - Division or Area Overview

1.1 Briefly describe how the division or area contributes to the district mission.

The philosophy of the Associate Degree Nursing (ADN) Program supports and implements the vision and mission of Antelope Valley College. The purpose of the program is to provide a quality education that empowers students with the knowledge, skills and caring attitudes to become competent entry-level professional registered nurses, life-long learners, and community service partners.

1.2 Place an "X" by each Institutional Learning Outcome (ILO) supported by the division or area.

- ☒ X Analyze diverse perspectives from a variety of disciplines and experiences that contribute to the development of self-awareness.
- ☒ X Value and apply lifelong learning skills required for employment, basic skills, transfer education, and personal development.
- ☒ X Demonstrate a breadth of knowledge and experiences from the humanities, social and behavioral sciences, arts, natural sciences, and mathematics.
- ☒ X Solve problems using oral and written communication, critical thinking and listening skills, planning and decision-making skills, information literacy, and a variety of technologies.
- ☒ X Demonstrate good citizenship and teamwork through respect, tolerance, cultural awareness, and the role of diversity in modern society.
- ☒ X Identify career opportunities that contribute to the economic well-being of the community.

1.3 After completing Parts 2-7, prepare a one page summary of the division/area. Interpret the significance of the findings. Note successes in supporting district strategic goals and where improvements are needed.

1.4 Name of person leading this review

Elizabeth Sundberg

1.5 Names of all participants in this review

Vickie Beatty, RN, MSN
 Bonnie Curry, RN, MSN
 Debra Dickinson, RN, MN
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 Sandra Robinson, RN, MS
 Casey Scudmore, RN, EdD
 Susan Snyder, RN, MA
 Marianne Stewart, RN, MSN
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 Denise Walker, RN, MSN

Part 2 - Data Analysis and Use

2.1 Five year headcount and FTES enrollment data.

District headcount/FTES: The 5 year District headcount total is 94,696 or an annual average of 18,939.2. The 5 year FTES total is 54,069.56 or an annual average of 10,813.912. There was approximately a 12% decrease in FTES in the District from 2008-09 to 2012-13 due to District budget reduction.

Annual headcount for the Associate Degree Nursing Program was:

2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
401	376	357	363	3.5	298

Annual FTES for the Associate Degree Nursing Program was:

2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
628	361	351	325	271	250

The annual headcount and FTES for the Associate Degree program has decreased since 2007. The recent budget reductions have resulted in a continuous decrease in the number of students and FTES since 2007. There was approximately a 31% decrease in FTES in the program from 2008-09 to 2012-13 due to budget reduction. This is a greater decrease than the District as a whole. We realize that the budget remains indefinite. The faculty members hope for maintenance of current levels of enrollment.

2.2 Report and analyze program/area data showing the quantity of services provided over the past four years.

The number of students enrolled in the ADN program is listed in the chart for 2.1. NS 110, 111, 120, 121, 122, 230, 231, 232, 240, and 241 have been offered every semester and NS 200 (transition course for VN-RN students) has been offered during intersession. No full time faculty or clerical assistants have been hired in the past 4 years. Several adjunct instructors have been added to the pool.

2.3 Review of the five year data on faculty ratios, and efficiency

Efficiency (FTES/FTEF)	2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013	
SUBJECT	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
NS	11.8	11.46	6.75	7.47	6.92	6.60	6.81	6.54	6.41	6.29	5.98	5.67

The decrease in efficiency in the ADN program for the years 2007-13 is a reflection of the reduction in enrollment.

PT/FT Faculty Ratio	District		NS Program	
Year	Fall	Spring	Fall	Spring
2007-2008	0.96	0.97	0.58	0.38
2008-2009	1.01	1.02	0.44	0.38
2009-2010	1.06	0.86	0.53	0.46
2010-2011	1.11	1.15	0.72	0.77
2011-2012	1.07	1.06	0.54	0.51
2012-2013	1.07	1.11	0.56	0.51

The PT/FT ratio in the ADN program has varied between 0.38 and 0.77 with the last two years being between 0.56 and 0.51. This is slightly below the District ratio but the FTES for the ADN program were decreased more than the District as a whole.

2.4 Using the discipline student success data provided by web link, please comment on any similarities or differences between race, gender, location, and modality groups in meeting the Institutional Standard of 68% for student success (students earning grades of A, B, C, Pass, or Credit). Identify what actions are planned to address trends and achievement gaps in the current academic year.*

Success rate by ethnicity for the NS program

Academic Year	Subject	Hispanic	Non-Hispanic	Ethnicity Unreported
2007-2008	NS	91%	89%	87%
2008-2009	NS	91%	94%	95%
2009-2010	NS	93%	95%	93%
2010-2011	NS	93%	93%	96%
2011-2012	NS	91%	94%	93%
2012-2013	NS	95%	95%	96%

Academic Year	Subject	American Indian/AK Native	Asian	Black or African American	Pacific Islander	White	Mexican/Central or South American	Other/Unknown
2007-2008	NS	88%	87%	77%	100%	91%	90%	87%
2008-2009	NS	92%	90%	90%	100%	96%	92%	95%
2009-2010	NS	87%	93%	91%	100%	96%	93%	93%
2010-2011	NS	88%	94%	87%	80%	94%	94%	96%
2011-2012	NS	95%	93%	92%	85%	96%	91%	93%
2012-2013	NS	97%	95%	93%	100%	95%	96%	96%

Success rate by gender for the NS program

Academic Year	Subject	Female	Male
2007-2008	NS	90%	85%
2008-2009	NS	94%	92%
2009-2010	NS	94%	93%
2010-2011	NS	94%	93%
2011-2012	NS	94%	90%
2012-2013	NS	96%	95%

Student success and retention by ethnicity, gender and race has generally been around 90% or higher for all groups. There is no significant difference. ADN Success by gender also greatly exceeded the institutional rate for both genders. The variation in success rate between females and males is difficult to analyze due to the small number of male students.

In an effort to increase the student's progression through the ADN program without course repetition several instructional modalities have been implemented. These efforts include Kaplan study support throughout the program, use of textbook based online quizzing program, increased use of simulation to address complex patient situations, expansion of the audio/visual library and curriculum reorganization. This appears to provide enough instruction variation to address the learning needs of an ethnically diversified cohort of students.

2.5 Analyze and summarize trends in student progression through basic skills courses, if applicable.

N/A

2.6 List degrees and certificates currently offered in the discipline. Analyze how resource adjustments or other changes during the past four years have impacted degree and certificate completion rates

Upon completion of the ADN program the graduate is awarded an Associate Degree in Science/Nursing. This degree permits the graduate to apply for permission to take the National Council Licensure Examination (NCLEX). If the exam is passed, the state where the graduate applied will issue a registered nursing license.

2.7 Using the data provided by web link, please comment on transfer rates to four-year institutions, license exam results, and job placement/post testing

No data was provided regarding transfer rates of ADN students into BSN programs.

Progression towards completion of a BSN is strongly advised throughout the program. Faculty members are also involved in the ongoing work to create a curriculum that provides a seamless transition from ADN to BSN programs within the California State University system.

This is being addressed by faculty with a curriculum revision to develop a model curriculum that is accepted Calif. State University Bakersfield which has a satellite campus at Antelope Valley College.

NCLEX pass rate averaged 88.64% for last 5 years and 90.48% for the last year. The ADN program NCLEX success rate falls within the median for programs of similar size in community colleges.

Job placement has not been determined. There is an anticipated increase in the number of jobs over the next 7 years of 21.6% with an average annual job opening of 4,560; this reflects job projections at a national level.

2.8 Career Technical Education (CTE) programs: Review the labor market data on the California Employment Development Department website for jobs related to your discipline. Comment on the occupational projections for employment in your discipline for the next two years. Comment on how the projections affect your planning. <http://www.labormarketinfo.edd.ca.gov/Content.asp?pageid=1011>

Statistically confirmed local job market data is not available. Word of mouth reports that job placement in the spring 2013 class was very poor. There were not many job offerings to the new graduates in the local area. The last 5 years did not provide the usual job placement levels to the graduates, with the expectation of Spring/Fall 2012. Again, this information is anecdotal.

"According to the Bureau of Labor Statistics' Employment Projections 2010-2020 released in February 2012, the Registered Nursing workforce is the top occupation in terms of job growth through 2020. It is expected that the number of employed nurses will grow from 2.74 million in 2010 to 3.45 million in 2020, an increase of 712,000 or 26%. The projections further explain the need for 495,500 replacements in the nursing workforce bringing the total number of job opening for nurses due to growth and replacements to 1.2 million by 2020." <http://www.bls.gov/news.release/ecopro.t06.htm>

Part 3 – Outcome Analysis and Use

- 3.1 Analyze changes in **student learning outcome (SLO)** and **program learning outcome (PLO)** assessment findings over the past five years. Cite examples of using data during that time as the basis for resource allocation (e.g. human, facilities/physical, technology, financial, professional development) or making other changes that resulted in or correlate with improved learning outcome findings over the past four years.*

Student learning outcomes and program learning outcomes were assessed for all current Nursing Science (NS) courses during the past five years. The results were analyzed and reported at the end of the semesters with action plans formulated. Discussions regarding SLOs and PLOs occurred during division meetings, curriculum meetings, faculty meetings, Associate Degree Nursing program planning and evaluation meetings, and Welcome Back Day (August 17, 2012). All ADN faculty members attend the Division, Faculty, Curriculum and Program Evaluation meetings with adjunct faculty attending as able. Changes to curriculum were made in response to SLO report findings. Use of simulation, electronic resources, skills lab, increased clinic time, change of instructor/student ratio in clinic have had impact on improving SLOs and PLOs.

SLO Analysis	Assessment findings	Data used for resource allocation	Changes resulting in improved SLOs
2013	All SLOs were met in Spring of 2013 except for NS 241. SLO # 3 (Integrate leadership skills to provide safe care for the acutely ill adult medical-surgical population) was partially met. The achievement target was set at 90% and 84% of the students met the target.	Attrition rate: It was noted that NS 241 continues to have high attrition 16% but it is lower than previous semester (17%). Skills lab usage: high usage for fundamental students, second semester students for IV module, and fourth semester students for IV push module. Simulation labs used by all courses. Learning center: dosage calculation class attended by approximately 15% of fundamentals students. Trend shows that students are now meeting SLO #3 which is measured by dosage calculation. (Fall 2011:51.5 %, Spring 2012:74.3 %, Fall 2012:76.9 %, and spring 2013: 83%). Trend shows that students are meeting SLO number 2 in NS 240 (Fall 2011:58.8%, Spring 2012:59.7%, and Spring 2012 82%).	Using 5:1 instructor/student ratio in clinic for transition students. Success Advisor met with every class and all students who had to complete GE requirements. Student success advisor also met with students for test review. Students referred to dosage calculation classes/math for nurses classes in learning center. Math/Care plan classes presented by faculty to students prior to semester beginning. Transition nursing course implemented 5:1 instructor/student clinic ratio. Faculty began tracking GE requirements of students from first semester forward.
2012	All SLOs were met in Spring and Fall of 2012 except for: NS 241, NS 240 Fall term, and NS 111 Fall term. NS 241: SLO #3 which measures the ability of students to apply theory/skills to clinical application	It was noted in discussions from ADN program evaluation and planning meetings that although the SLOs and PLOs are being met at the predetermined level in most NS courses, there continues to be high attrition in	Faculty discussed implementing 5:1 clinic instructor/student ratio in transition nursing course. Student success counselor met with all classes and with individuals having difficulty with test taking. Students referred to Learning

	<p>was partially met in spring 2012. The achievement target was set at 90% and 87.5% of students met the target. SLO #3 not met in fall 2012 with only 78% of students meeting set target.</p> <p>NS 240: SLO #2 measures the ability of students to apply leadership and professional theory to clinical situations. The SLOs were not met spring 2012 with 60.7% of students meeting target and fall 2012 with 59.7% of students meeting the target (achievement target set at 75%).</p> <p>NS 111: SLO #4 measures the ability of students to apply clinical skills. 64.7% of students met the achievement target which was set at 75%. SLO #3 measures the ability of students perform dosage calculations. Spring 2012 was partially met with 74.3% of students meeting the achievement target which was set at 75%.</p>	<p>the nursing science courses. Attrition rate for NS 111 for Spring term was 10%, for NS 241 Spring term 21.7% and Fall term it was 12.5%, and for NS 122 Fall term it was 15.8%.</p>	<p>Center for dosage calculation/math for nurses classes.</p> <p>Math/Care plan classes held by faculty for students prior to semester beginning</p> <p>Fall 2012 faculty implemented use of electronic resources for students to use (PrepU and Kaplan).</p> <p>Health Sciences building opened with three simulation labs.</p>
2011	<p>SLOs met in most courses except for:</p> <p>NS 241 SLO #3, NS 240 SLO #2 not met and NS 111 SLO #3 not met.</p> <p>NS 241: SLO #3 which measures the ability of students to apply theory/skills to clinical application was met at 74 % (achievement target set at 90%).</p> <p>NS 240: SLO #2 which measures the ability of students to apply leadership and professional theory to clinical situations was met at 58.8% (achievement target set at 75%).</p> <p>NS 111: SLO #3 measures the ability of students perform dosage calculations. Spring 2011 60% of students met achievement target which was set at 75%. Fall of 2011 51.5% of students met set target.</p>	<p>Attrition for NS 111 Spring term is 25%, NS 122 Spring term is 22% and Fall term is 18%, and NS 241 Spring term is 17.9% and Fall term 26%.</p>	<p>Revised SLO in all courses (PLOs also)</p> <p>TEAS (assessment exam) changed</p> <p>Simulation incorporated into all courses.</p> <p>Increased clinic time for NS 200 (transition course).</p>
2010	<p>All courses in the ADN program have SLOs. The ADN program also has established PLOs. The SLOs for NS courses have been modified this past year. In some courses the assessment methodology has also been modified.</p>	<p>The most frequently identified resource that faculty believe students need continues to be engagement in learning resources for study skills, test taking, math remediation, and test anxiety. Although the services are provided and</p>	<p>Math/Care plan classes held by faculty for students prior to semester beginning.</p> <p>Faculty discussed implementing simulation into all courses and the necessity of having a simulation coordinator.</p>

		advertised, there is not a system that is set up to monitor student participation in specific offerings, such as “test taking skills for nursing.” The current computer database in the Learning Center, for example, lists offerings by broad and generic terms, such as “study skills workshop. The RN program utilizes a student “tracking form” to identify student referrals to specific learning resources. However, there is not currently a way to track whether a student actually utilizes the specific resource.	
2009	SLOs and PLOs have been defined for each course in the ADN program. Methods of assessment for each SLO and PLO have also been designed. Analysis of SLOs indicates that revision of assessment tools is needed in some courses.	Faculty reviewed Attrition rates of NS courses and tracked overall attrition of program.	

Program Learning Outcomes: PLOs for nursing science courses were established in 2010. The PLOs for the program were updated spring of 2011. Data indicates that PLO #3 which measures the ability of students to achieve a predicted probability of passing the licensure exam (NCLEX) was not met during the spring 2010 through spring 2012 period. During the fall 2012 term, PLO #3 was partially met and it was met spring 2013. Between fall of 2011 and spring of 2013 changes were made in the nursing science curriculum. Clinic time was increased in the transition course with the addition of one clinic day (7 hours), 5:1 instructor/student ratio was implemented for transitional students, use of electronic resources to improve study skills and test taking were implemented, simulation was incorporated into all courses, and the Health Sciences building opened with three simulation labs.

3.2 Analyze changes in operational outcomes (OO) findings over the past five years. Cite examples of using data during that time as the basis for resource allocation (e.g. human, facilities/physical, technology, financial, professional development) or making other changes that resulted in or correlate with improved OO findings over the past four years.*

NA

Part 4 - Stakeholder Assessment

4.1 Assess how well the program serves the needs of the students, district, and community. Support statements with findings from student, employee, and/or community surveys. Include feedback from other sources if relevant (e.g. advisory committees, employers in the community, universities, scores on licensure exams, job placement).

The health sciences professional and vocational programs have advisory committees that are composed of members of their respective professions. The committees meet once or twice a year to discuss developments in the professions and changes in the curriculum. Stakeholders in the Registered Nurses Program include: Antelope Valley College, Antelope Valley Hospital, Palmdale Regional Medical Center, California State University Bakersfield, High Desert Medical Group, Kaiser Permanente, Antelope Valley Healthcare, and Antelope Valley Community Clinic. Representatives from these areas have attended the Advisory meeting over the past five years.

Areas that were discussed were the model curriculum that is under development and will be submitted for review in November 2013, student and program learning outcomes, simulation, availability of preceptors and use of facilities, standards of care during clinical practice and computer access and charting. It was stressed that students needed to develop an attitude of life-long learning and becoming part of the team. The facilities were looking to have new graduates step up to continued training instead of feeling that learning was completed.

The Registered Nursing Program is very proactive in referring students early for evaluation and help in the academic areas. There is a close relationship with the Learning Center and the Office of Students with Disabilities. During the first semester, any indication of problems is referred. At one point during the past five years, we had a Success Advisor that would work with the students and determine the best way they could deal with educational issues. Unfortunately, the economic downturn caused a significant loss in this area which has negatively impacted our nursing students. .

A relationship has developed with California State University Bakersfield for transitioning students into their program. Students are counseled in courses needed for transfer and most have been able to complete them prior to graduation. The program directors are invited to speak to the classes individually as well as attend the advisory meetings.

Our clinical simulations have continued to increase each semester. We start with low fidelity and gradually increase each semester to higher levels. Each specialty, such as Obstetrics and Pediatrics, has their own simulators unique to their clinical areas. The lack of a simulator coordinator has slowed the progression of our program.

The Exit Interviews from the facilities have a positive note with very little suggestions for improvement over those comments made during Advisory Meetings. They feel the students are a help to the staff and are well prepared for the clinic area. The students spend time with the patients and are appreciated by the patients and staff for doing so.

Job placement is not something that is in our requirements. We discuss resumes and job interviews in the professional courses. Students are also reminded that each visit to the clinical arena is a time to impress the staff and management about your skills.

The division participates in high school orientations in the spring of each year. The Dean and faculty make community presentations to students in kindergarten through high school (Mojave High School, Desert Christian School and Palmdale High School) and participate in the annual career day sponsored by the Antelope Valley Union High School District.

The Enrollment Growth for Nursing grant provides funding for recruitment of students in the Palmdale High School Medical Careers Academy to take the college's assessment test in the spring of their junior year. The test day includes orientation to the divisions 25 programs. Follow-up on the assessment test results is done by members of the counseling faculty.

The students have been invited to participate in the influenza immunization of the staff of Palmdale Regional Medical Center as well as Antelope Valley Hospital. They are also given the opportunity to function in the TB testing annually for the staff. Other students have participated in the Senior Expo.

Other faculties teach CPR in the Corporate and Community Services department. The college has affiliation agreements with University of Phoenix, California State University, Dominguez Hills, Chamberlain University and Kaplan University to provide educational preceptorships for students interested in nursing education careers. Since 2006, three students have participated in this activity.

Mission: The mission of the program is to provide a quality education that empowers students with the knowledge, skills and caring attitudes to become competent entry-level professional registered nurses, life-long learners, and community service partners.

Labor market demand for California (for CTE programs only):

	2010 Jobs	2020 Anticipated Jobs	Percent Change	Average annual job opening
Registered Nurses	251,800	306,100	21.6%	4560

Part 5 - Goals and Objectives

5.1 Review the goals identified in your most recent comprehensive self-study report and last year's annual report. Indicate which have been completed and which have been eliminated.*

Goal #1 To Maintain BRN approval

We had an interim visit from the Board of Registered Nursing Fall of 2012. Recommendations were to decrease attrition, increase administrative release time, and have a more flexible lab schedule. At the curriculum meeting on December 3, 2012, faculty members discussed strategies to decrease attrition in the nursing program. These strategies were implemented. The release time for the ADN Chair was increased to 9 LHE/semester. A full time assignment for skills lab/simulation was assigned to a full time faculty member.

This is an ongoing goal (see 5.3).

Goal #2: To enhance integration of simulation into the curriculum.

Over the past few years we have received funding from nursing grants and Perkins for simulation manikins. Our manikins are currently up to date. We have a new full time skills lab/simulation position. We need ongoing faculty development for all faculty members. Future plans include interdisciplinary simulations.

This is an ongoing goal (see 5.3) but has been partially met as we have integrated simulation into all courses. We need a simulation coordinator to further develop the program.

Goal #3: Increase student success in the program and on the National Council Licensure Examination (NCLEX)

We have a high rate of passing for first time NCLEX takers. Our last reported NCLEX pass rate was 90.48%. Our attrition rate for the program (calculated as the percentage of students that do not complete the program in 4 semesters) remains high. At the curriculum meeting on December 3, 2012, faculty members discussed strategies to decrease attrition in the nursing program. These strategies were implemented:

1. Continue with a major curriculum revision. We plan to submit the revised curriculum to the BRN and AP&P (CurricUNET) by fall of 2013.

2. We adopted Kaplan Integrated Testing Program and NCLEX-RN® Review. It includes integrated testing with online remediation, case studies and NCLEX exam review.
3. Textbooks were bundled with PrepU, an online learning resource that corresponds with the textbook.
4. Faculty will counsel students on the importance of completing their GE requirements. We are also exploring the option of having GE requirements as pre-requisites.
5. The VN students that entered the program spring of 2013 had a 5:1 student to instructor ratio.
6. We offered math remediation and care planning classes to help students review before the semester started.

The Student Success Advisor was funded by a nursing grant which is no longer available. We feel this position is necessary for students who are struggling in classes to help them be successful. Now, a student success advisor is not available to review exams, discuss test taking skills, counsel about graduation requirements, and counsel concerning stress reduction and life changes.

This is an ongoing goal (see 5.3) but has been partially met as our NCLEX passing rate is above the national standard.

Goal #4: To continue to fund the current open skills lab hours, student success advisor, and simulation coordinator.

This is an ongoing goal (see 5.3) but has been partially met as we have a full time skills lab/simulation position but do not have a student success advisor or a simulation coordinator.

Goal #5: To increase technology in the classroom, develop online classes and have student access to computers.

Technology has been provided but it frequently does not work and there is inadequate support. This is an ongoing goal (see 5.3).

Goal #6: To assess SLOs and PLOs each semester.

We have submitted SLOs and PLOs every semester. Because this is an accreditation requirement this will remain an ongoing priority goal (see 5.3).

Goal # 7: To replace full-time faculty.

This goal has been completed as 2 full time faculty members from the Vocational Nursing program were added to the ADN program. If the Vocational program is reinstituted this will become a future goal.

Goal #8: To revise the curriculum to include more acute medical-surgical nursing in each semester.

We are actively revising the curriculum (see 5.3).

Goal #9: Increased release time for administrative duties.

This goal has been partially met as we now have 18 LHE/year of release time.

- 5.2 List discipline/area goals and objectives related to **improving outcome findings and/or the success of the various learner populations** in completing courses, certificates, degrees, and transfer requirements. Discipline/area goals must be guided by district Strategic Goals and Plan Summaries in the Educational Master Plan (EMP). They must be supported by an outcome action plan, data analysis, national or professional standards, and/or a requirement or guideline from an outside agency (e.g. legislation, Chancellor's Office, accrediting body, professional board). Consider curriculum, instruction, assessments, program services, operations, collaborations, scheduling, location, technology, etc.*

Current (up to three years)

Goal: Increase student success in the program and on the National Council Licensure Examination (NCLEX)

- Guided by district Strategic Goal(s) # 1a
- Our current NCLEX pass rate is 90.48%. Consistently the NCLEX pass rate for Antelope Valley College is well above the national average and above our goal. Our attrition rate of 44% is well above the suggested attrition rate.

Objectives: Have our NCLEX pass rate above the national average and decrease attrition.

Goal: To Maintain BRN approval

- Guided by district Strategic Goal(s) # 3a
- There was an interim visit from the BRN Fall 2012. Recommendations were to decrease attrition, increase administrative release time, and have a more flexible lab schedule. At the curriculum meeting on December 3, 2012 faculty members discussed strategies to decrease attrition in the nursing program. These strategies were implemented. The release time for the ADN Chair was increased to 9 LHE/semester and this level needs to be continued in order for the program to maintain approval of the Board of Registered Nursing
- A full time assignment for skills lab/simulation was assigned to a full time faculty member.

Objectives: To comply with all requirements set forth in the California Nurse Practice Act.

Goal: To continue to fund the current open skills lab hours, student success advisor, and simulation coordinator.

- Guided by district Strategic Goal(s) # 1b
- We offer open skills lab hours, math remediation and care planning classes help students review before the semester starts. We have integrated simulation into the curriculum and correlated it with the course content that is being presented. The Student Success Advisor was funded by a nursing grant which is no longer available. A student success advisor is not available to review exams, discuss test taking skills, counsel about graduation requirements, and counsel concerning stress reduction and life changes.

Objectives: Fund a full time faculty member with 100% assigned time to the skills lab/simulation coordinator. Continue to fund a student success advisor.

Goal: To enhance integration of simulation into the curriculum.

- Guided by district Strategic Goal(s) # 5b and 5d
- We have integrated and implemented simulation into all nursing courses.

Objectives: To continue funding for conferences and faculty development on the use of simulation in the classroom and debriefing techniques. We need to further develop the simulation program to improve student learning outcomes.

Near Term (three to five years)

Goal: To implement a model curriculum to include more acute medical-surgical nursing in each semester.

- Guided by district Strategic Goal(s) # 1h
- We have approved the new philosophy, conceptual framework, graduate learning outcomes, and curriculum plan. The curriculum is currently being entered C-MAP. The course proposals and CORs are currently being developed for a model curriculum.

Objectives: Continue with a major curriculum revision. We plan to submit the revised curriculum to the BRN and AP&P (CurricUNET) by fall 2013.

Goal: To increase technology in the classroom, develop online classes and have student access to computers.

- Guided by district Strategic Goal(s) # 7a
- We have 25 lap top computers for student use that took 3 months to get a logon account. Problems are reported and are not resolved. The technology in the classrooms frequently does not work. There is no electricity to student outlets in the classroom. There is no clear delegation of who should be solving technology problems in the HS building including nursing simulators.

Objectives: To increase use of technology in the classroom. To have ITS provide more resources for computer technological support. Have working computers available in the skills lab for student testing. The faculty will develop on-line learning classes.

- 5.3 List discipline/area goals and objectives **directly related to advancing Strategic Goals.** Discipline/area goals must be guided by district Strategic Goals and Plan Summaries in the Educational Master Plan (EMP). They must be supported by data analysis or other documentation.

Current (up to three years)

Goal: To assess SLOs and PLOs and develop action plans each semester.

- Guided by district Strategic Goal(s) # 1b
- We have submitted SLOs and PLOs every semester. We added action plans to our goal.
-

Objectives: Because this is an accreditation requirement this will remain an ongoing priority.

Goal: To provide a safe environment for student learning.

- Guided by district Strategic Goal(s) # 1

Objectives: Students require a safe environment for learning.

We have safety concerns for the Health and Sciences building. Classrooms cannot be locked from the interior. Cell phones frequently do not work. Conversations are not confidential as they can be heard in other offices.

Part 6 - Resource Needs

Identify significant resource needs that should be addressed currently (up to three years), near term (three to five years), and long term (five to ten years). If there may be safety issues, enrollment consequences, or other important concerns if a resource is not provided please make this known.*

6.1 List needed human resources. List titles in priority order. Identify which discipline/area goal(s) guides this need.

1. Clerical assistant full time for Health Science Division office
2. Student Success Advisor
3. Simulation lab coordinator full time
4. Computer Technology Support
5. Maintenance for mannequins, computers, and associated technology

ADN Program Goal: To continue to fund the current open skills lab hours, student success advisor, and simulation coordinator.

6.2 List needed technology resources in priority order. Identify which discipline/area goal(s) guides this need.

1. IV pumps (Alaris), both area hospitals are switching to this brand
2. IV Catheter simulation computers that are functional
3. Viewing of simulation rooms-sound, live feed, recording
4. Computers on rolling cart for each room for computer charting and medication administration to mirror the hospital work flow
5. Computers at nursing station with internet
6. Need to be able to use large flat screen TVs in study rooms for debriefing and live feed from simulation rooms
7. Documentation system simulation

ADN Program Goal: To increase technology in the classroom, develop online classes and have student access to computers.

6.3 List facilities/physical resources (remodels, renovations, or new) needed to provide a safe and appropriate student learning and/or work environment. List needs in priority order. Identify which discipline/area goal(s) guides this need.

1. Functional electrical outlets in labs and classrooms
2. Computer lab for nurses in HS 205
3. Telephone conferencing available in HS 194
4. Interior locking mechanisms for all classrooms and labs in the HS building
5. The HS building needs to be evaluated for noise level as conversations can be heard outside an office.

ADN Program Goal: To increase technology in the classroom, develop online classes and have student access to computers. To provide a safe environment for student learning.

- 6.4 List needed professional development resources in priority order. Identify which discipline/area goal(s) guides this need.

1. Simulation training
2. Faculty training of monitoring equipment currently installed in simulation rooms

ADN Program Goal: To enhance integration of simulation into the curriculum.

3. NCLEX success counseling

ADN Program Goal: Increase student success in the program and on the National Council Licensure Examination (NCLEX)

4. Faculty training on online teaching strategies and electronic testing

ADN Program Goal: To increase technology in the classroom, develop online classes and have student access to computers.

- 6.5 List any other needed resources in priority order. Identify which discipline/area goal(s) guides this need.

1. Service contracts for simulation and skills lab equipment

ADN Program Goal: To increase technology in the classroom, develop online classes and have student access to computers.

Part 7 - Recommendations and Comments

- 7.1 List recommended changes to the Educational Master Plan to:
- Address external issues or mandates such as legislation, industry, and professional standards, etc.
 - Respond to outcome findings.
 - Reflect changes in technology, methodology, and/or disciplines.
 - Address student achievement gaps and/or meet other student needs.

The Educational Master Plan should include an objective under Goal #1 for approval from outside agencies such as the Board of Registered Nursing.

7.2 What changes in the program review process would improve institutional effectiveness or make the results more helpful to the program?

There are some areas that are repetitious and need to be condensed so that material is not repeated.

Comprehensive Program Review Self-Study Report

Division/Area Name: ***Child Development Center***

Year: 2013

Part 1 - Division or Area Overview

1.6 Briefly describe how the division or area contributes to the district mission.

1.7

The Child Development Center contributes to the district mission through the following:

- It promotes access to higher education for student parents by providing an on-campus high quality child development services at low cost or no cost to eligible students thus promoting self-sufficiency;
- It supports students' learning and understanding of child development and early childhood education through provision of an on-site observation/field work setting to college students studying Child and Family Education, Nursing, Psychology and High School ROP Program;
- It promotes collaboration with Child and Family Education department through implementation and demonstration of course curricula in classroom practices and mentorship of practicum students;
- It provides a comprehensive, developmentally appropriate early childhood program designed to foster optimal growth and development of the whole child;
- It provides parents (students, staff, and community members) with parent information and education program and activities;
- It efficiently maintains the physical and social environment in order to provide a safe, healthy, appropriate and productive teaching, learning, and working of all students, children, and staff;
- It administers all programs and contracts in compliance with appropriate State and Federal guidelines.

1.8 Place an "X" by each Institutional Learning Outcome (ILO) supported by the division or area.

X Analyze diverse perspectives from a variety of disciplines and experiences that contribute to the development of self-awareness.

X Value and apply lifelong learning skills required for employment, basic skills, transfer education, and personal development.

X Demonstrate a breadth of knowledge and experiences from the humanities, social and behavioral sciences, arts, natural sciences, and mathematics.

X Solve problems using oral and written communication, critical thinking and listening skills, planning and decision-making skills, information literacy, and a variety of technologies.

X Demonstrate good citizenship and teamwork through respect, tolerance, cultural awareness, and the role of diversity in modern society.

X Identify career opportunities that contribute to the economic well-being of the community.

1.9 After completing Parts 2-7, prepare a one page summary of the division/area. Interpret the significance of the findings. Note successes in supporting district strategic goals and where improvements are needed.

1.10 Name of person leading this review: Katarina Orlic-Babic

1.11 Names of all participants in this review: Laura Burke, Anita Davidson, Rebecca Fiske, Deborah King, Tina Pullum.

Part 2 - Data Analysis and Use

Data was used from the Program Review website. Additional data was used from the Department of Institutional Research and Effectiveness (DIERP).

- 2.1 Please review the five year headcount and FTES enrollment data provided on the web link. Comment on trends and how they affect your program.* N/A
- 2.2 Report and analyze program/area data showing the quantity of services provided over the past four years (e.g. number of students served, books sold, employees hired, acreage maintained).

	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013
Total enrolled children	197	158	174	161	190

In 2008/2009 we had an Infant/Toddler program that closed due to the budget cuts.

In 2011/2012 he had more full time children enrolled.

In 2012/2013 a higher number of part time children were enrolled.

	2008 - 2011	2011/2012	2012/2013
Number of observations/assignments completed	500-750 average per year	943	1,204

Number of assignments has significantly increased because the AVC Child Development Center is the only preschool in the area with observation booths from which students can observe children without being physically in the classroom. There are fewer and fewer programs in the valley allowing students to observe/complete their assignments in the classrooms.

- 2.3 Please review the five year data on sections offered, faculty ratios, and efficiency data provided on the web link. Comment on trends and how they affect your program.

N/A

- 2.4 Using the discipline student success data provided by web link, please comment on any similarities or differences between race, gender, location, and modality groups in meeting the Institutional Standard of 68% for student success (students earning grades of A, B, C, Pass, or Credit). Identify what actions are planned to address trends and achievement gaps in the current academic year.*

N/A

- 2.5 Analyze and summarize trends in student progression through basic skills courses, if applicable.

N/A

- 2.6 List degrees and certificates currently offered in the discipline. Analyze how resource adjustments or other changes during the past four years have impacted degree and certificate completion rates.

N/A

- 2.7 Using the data provided by web link, please comment on transfer rates to four-year institutions, license exam results, and job placement/post testing. If applicable, cite examples of using additional resources (e.g. human, facilities/physical, technology, financial, professional development) or making other changes during the past four years that have resulted in improvements in transfer rates to four-year institutions, license exam results, and job placement/post testing.

N/A

- 2.8 Career Technical Education (CTE) programs: Review the labor market data on the California Employment Development Department website for jobs related to your discipline. Comment on

the occupational projections for employment in your discipline for the next two years. Comment on how the projections affect your planning.

<http://www.labormarketinfo.edd.ca.gov/Content.asp?pageid=1011>

N/A

Part 3 – Outcome Analysis and Use

- 3.1 Analyze changes in **student learning outcome (SLO)** and **program learning outcome (PLO)** assessment findings over the past five years. Cite examples of using data during that time as the basis for resource allocation (e.g. human, facilities/physical, technology, financial, professional development) or making other changes that resulted in or correlate with improved learning outcome findings over the past four years.*
- 3.2 Analyze changes in **operational outcomes (OO)** findings over the past five years. Cite examples of using data during that time as the basis for resource allocation (e.g. human, facilities/physical, technology, financial, professional development) or making other changes that resulted in or correlate with improved OO findings over the past four years.*

As a state funded program, Child Development Center is required to conduct an annual review using the Desired Results System. Each year, children are assessed with Desired Results Developmental Profile-Revised assessment tool, classrooms are assessed with Early Childhood Environment Rating Scale-Revised tool, and an overall program is assessed by the Parent Survey.

Desired Results Developmental Profiles-Revised

This tool is being used to assess children's development and progress toward thirty nine desired results identified as essential in development of preschool children. Teachers need to complete the first assessment within 60 days of child's enrollment into the program and then every six months thereafter. If the child is being enrolled the second year at the Child Development Center, the child needs to be assessed again within 60 days in the new fiscal year and then every six months thereafter. For each of the thirty nine measures three samples of documentation need to be gathered in order to support teacher's assessment of child's competence at a specific level. Children are being rated according to the following scale: not yet at first level; exploring; developing; building and integrating.

Over the past five years, two areas have consistently been showing as the lowest scoring areas: math and literacy. Although children have steadily been improving in literacy (from 51% at building/integrating in 2009/10 to 58% at building/integrating in 2012/13) in math, children's scoring dropped from 30% at building/integrating (in 2012) to 20% building/integrating in 2013. The reason for this drop was enrollment of new children mid-year, especially the three-year-olds.

In July 2012, the state introduced a family fee for the first time. If a family's earnings are above a certain amount but they still qualify for the state preschool the family has to pay anywhere between \$1.00 to \$8.88 a/day. This forced some families to withdraw their children in November/December. In order to fill the program to its capacity and earn our contract we were forced to enroll new children. These new children 1) never attended a preschool before and 2) were three-year-olds. Their assessment skewed the final data of performance on the Desired Results.

Early Childhood Environment Rating Scale-Revised

In June 2010 and August 2010 we experienced two flooding incidents. The classrooms got flooded and the bottom of the furniture which we have had since 1995 got ruined from the water. In addition, cabinet doors absorbed water and cannot be locked and in some cases even closed. Administering Early Childhood Environmental Scale-Revised was done for the state self-study.

The two areas identified for improvement were: furnishing for routine care and furnishings for relaxation and comfort. In 2012 we were able to replace tables/chairs with some of the foundation funds earmarked for Child Development Center. However, the carpet and the bottom cabinets will eventually have to be replaced.

Desired Results Parent Survey

In 2009, 12% were dissatisfied with parent involvement opportunities and 14% with interaction with other parents. To improve this, we have been offering multiple family events throughout a year: Open House each fall, two Literacy Nights, a Math fair, a Kindergarten Readiness workshop two –three additional workshops on literacy or discipline, a Curriculum Fair at the end of the year. As a result, in 2013, 10% of the parents were still dissatisfied with parent involvement opportunities but the replies were from one class and the 10% represented one response (a total of 10 parents replied to the survey).

In order to improve our performance, the following actions have been developed:

- Yearly staff training by the director on site;
- Staff training in California Preschool Learning Foundations conducted by California Preschool Foundation Network (free of charge, travel cost covered);
- Peer assessment of the environment to assess needs in materials and activities;
- Curriculum enhancement and parent involvement (through “homework”)
- Parent training (workshops)
- Purchase of new materials.

There is definitely a need for funding to cover some other growth development opportunities, materials, and consultants for parent workshops.

Part 4 - Stakeholder Assessment

- 4.1 Assess how well the program serves the needs of the students, district, and community. Support statements with findings from student, employee, and/or community surveys. Include feedback from other sources if relevant (e.g. advisory committees, employers in the community, universities, scores on licensure exams, job placement).

Parent Surveys continue to be used to assess how well the program serves the needs of the students, staff and the community at large. Except in the areas of parent involvement and interaction (above) parents have been extremely satisfied or satisfied in the program. The program director would like to develop a survey of the students utilizing the center for observations/assignments and will work with CFE staff on this project.

Part 5 - Goals and Objectives

- 5.1 Review the goals identified in your most recent comprehensive self-study report and last year's annual report. Indicate which have been completed and which have been eliminated.*

The following goals were developed in the last program review:

- 1 We will continue to seek additional funding for renovation needs and replacement of furniture (we applied for Donald McDonald's grant in June 2008 but received 1/3 of the amount requested which is not enough to replace all the furniture that needs to be replaced or repaired.

There were no state renovation and repair grants available for the past several years.

- 2 Replace existing carpet. During the floods the carpet got soaked and although the water was extracted all the dirt got into every thread of the carpet. Replacing the carpet would drastically improve health standards.

There were no state renovation and repair grants available for the past several years.

- 3 In order to improve children's competence in areas of math and literacy, the staff need to engage in professional growth experiences. Due to the budget constraints, not only were the staff unable to participate in conferences and workshops but there was a limited funding to replace the staff with substitutes.

There was a slight increase in travel funding and teachers were able to participate in six professional growth activities/workshops in math and literacy.

- 4 Hire a part time Early Childhood Specialist Support Coordinator. There are four early childhood specialists who work with children from 7:45 to 4:15 five days a week. They need to plan and implement curriculum, assess children, complete Desired Results Developmental Profiles on all children, conduct parent/teacher conferences, mentor and supervise teacher assistants and two to three practicum students. Many of these responsibilities are done during their free time because they have to be in the classroom teaching the children. This coordinator would be able to release the early childhood specialist from the teaching once a week for a half day so that they can complete other assignments during their work hours, including their work with CFE students.

No attempts were made in this area due to the lack of funding.

- 5.2 List discipline/area goals and objectives related to **improving outcome findings and/or the success of the various learner populations** in completing courses, certificates, degrees, and transfer requirements. Discipline/area goals must be guided by district Strategic Goals and Plan Summaries in the Educational Master Plan (EMP). They must be supported by an outcome action plan, data analysis, national or professional standards, and/or a requirement or guideline from an outside agency (e.g. legislation, Chancellor's Office, accrediting body, professional board). Consider curriculum, instruction, assessments, program services, operations, collaborations, scheduling, location, technology, etc.*

Not applicable

- 5.3 List discipline/area goals and objectives **directly related to advancing Strategic Goals**. Discipline/area goals must be guided by district Strategic Goals and Plan Summaries in the Educational Master Plan (EMP). They must be supported by data analysis or other documentation.

Current (up to three years) Hire a part time Early Childhood Specialist Support Coordinator.

Goal: Release teachers to work with CFE students and complete appropriate assessments of the children.

- Guided by district Strategic Goal(s) #_1__
- Guided by ____1__ Plan Summary in EMP
- Supporting action plan, data analysis, or other documentation: Each teacher supervises three to five practicum students. Each teacher has to complete children's assessments and curriculum development. There is no release time to complete these requirements.

Objectives: Hire a part time early childhood coordinator who will release each teacher one half-day per week.

Current (up to three years)

- Goal: Provide students with opportunities to complete Early Childhood Environment Rating Scale –R and Desired Results Developmental Profile-R assessments in the classroom. Accommodating over 1,000 students in observation booths per year prevents some students to practice and perfect completing such important early childhood education tools.
- Guided by district Strategic Goal(s) #_1__
- Guided by ___1___Plan Summary in EMP
- Supporting data analysis or other documentation: Over 1,000 observations completed per year in booths.
- Objectives: Coordinate with the CFE department to require fingerprinting of the students when they enroll in CFE 105 and consequently allow them to be in the classroom when completing such important assessment tools.

Current (up to three years)

- Goal: Reinstating the Infant Toddler classroom.
- Guided by district Strategic Goal(s) #_1__
- Guided by ___1___Plan Summary in EMP
- Supporting data and analysis: Almost all of the CFE courses require observations of infants/toddlers.

There is an increasing number of families requiring infant/toddler care. We closed the program not because we did not have children but to participate in district wide budget cut.

- Objectives: seek support from the district to support the program. Apply for the infant/toddler license. Hire a teacher.

Current (up to three years)

- Goal: New refrigerator/freezer
- Guided by district Strategic Goal(s) #_1__
- Guided by ___1___Plan Summary in EMP
- Supporting data analysis or other documentation: Children are served two snacks per day and our refrigerator/freezer is 18 years old. We keep repairing but it may soon break completely.
- Objectives: Replace the existing commercial refrigerator/freezer with a new one.

Current (up to three years)

Goal: Install Wi-Fi in the classrooms.

- Guided by district Strategic Goal(s) #_7__
- Guided by ___7a___Plan Summary in EMP
- Supporting data analysis or other documentation: Each child needs 2 assessments per year. There are 180-190 children enrolled. Teachers need to collect documentation, input data, and integrate with curriculum in the classrooms using the state web site.

Objectives: Have Wi-Fi in the classrooms so that the teachers can use it for curriculum development, implementation, and child observation.

Near Term (three to five years)

Goal: Replace flooring and cabinets

- Guided by district Strategic Goal(s) #_5__
- Guided by ___5C___Plan Summary in EMP

- Supporting data analysis or other documentation: building that is 18 years old and 2 floods

Objectives: Seek funding to replace flooring and cabinets. In 3-5 years state budget will hopefully improve and there will be funding for renovation and repair.

Long Term (five to ten years)

Goal: A specific target: Child Development Center on Palmdale campus

- Guided by district Strategic Goal(s) #_1__
- Guided by ___1___Plan Summary in EMP
- Supporting data analysis or other documentation: Over 1,000 observations/assignments by students. As CFE is going to continue to provide a full certificate program in Palmdale, there is a need for a new center/laboratory school where students will be able to fulfill their course requirements.

Objectives: Seek grants/contracts to build a new center in Palmdale.

Part 6 - Resource Needs

Identify significant resource needs that should be addressed currently (up to three years), near term (three to five years), and long term (five to ten years). If there may be safety issues, enrollment consequences, or other important concerns if a resource is not provided please make this known.*

- 6.1 List needed human resources. List titles in priority order. Identify which discipline/area goal(s) guides this need.

Short term:

Part time early childhood coordinator (#1)

Full time infant/toddler (#1)

Long term:

Site supervisor for Palmdale campus Child Development Center (#1)

Secretary for Palmdale campus Child Development Center(#1)

Three to five teachers for 3-5 classrooms for Palmdale campus Child Development Center

Student assistants for the same center (#1)

- 6.2 List needed technology resources in priority order. Identify which discipline/area goal(s) guides this need.

Currently:

Wi-Fi in 5 classrooms at the Child Development Center in Lancaster (goal # 3)

- 6.3 List facilities/physical resources (remodels, renovations, or new) needed to provide a safe and appropriate student learning and/or work environment. List needs in priority order. Identify which discipline/area goal(s) guides this need.

Refrigerator/freezer (goal # 1)

Carpet (goal # 2)

Furniture (goal # 1)

- 6.4 List needed professional development resources in priority order. Identify which discipline/area goal(s) guides this need.

State conferences and workshops addressing the state preschools topics (goal # 3)

- 6.5 List any other needed resources in priority order. Identify which discipline/area goal(s) guides this need.

Part 7 - Recommendations and Comments

- 7.1 List recommended changes to the Educational Master Plan to:
- Address external issues or mandates such as legislation, industry, and professional standards, etc.

California Department of Education is constantly changing requirements and imposing mandates. We do not know from one year to another which requirements/regulations we will be required to follow. The director is staying up to date with these requirements and trains the staff accordingly.

- Respond to outcome findings.
- Reflect changes in technology, methodology, and/or disciplines.
- Address student achievement gaps and/or meet other student needs.

- 7.2 What changes in the program review process would improve institutional effectiveness or make the results more helpful to the program?

None identified.

Comprehensive Program Review Self-Study Report

Division/Area Name –Health Sciences/Child and Family Education

Year--2013

Part 1 - Division or Area Overview

1.12 Briefly describe how the division or area contributes to the district mission.

1.13 Place an "X" by each Institutional Learning Outcome (ILO) supported by the division or area.

☒ Analyze diverse perspectives from a variety of disciplines and experiences that contribute to the development of self-awareness.

☒ Value and apply lifelong learning skills required for employment, basic skills, transfer education, and personal development.

☒ Demonstrate a breadth of knowledge and experiences from the humanities, social and behavioral sciences, arts, natural sciences, and mathematics.

☒ Solve problems using oral and written communication, critical thinking and listening skills, planning and decision-making skills, information literacy, and a variety of technologies.

☒ Demonstrate good citizenship and teamwork through respect, tolerance, cultural awareness, and the role of diversity in modern society.

☒ Identify career opportunities that contribute to the economic well-being of the community.

1.14 After completing Parts 2-7, prepare a one page summary of the division/area. Interpret the significance of the findings. Note successes in supporting district strategic goals and where improvements are needed.

1.15 Name of person leading this review
CFE: Melanie Parker lead the review.

1.16 Names of all participants in this review
CFE participants: Ande Sanders, Cathy Overdorf, and Katarina Orlic-Babic
Adjunct faculty were invited to comment, were surveyed, and their responses are included in this report.

Part 2 - Data Analysis and Use

2.1 Five year headcount and FTES enrollment data

The district annual headcount decreased 21.9% from 2008-2009 to 2012-2013. During that time, the CFE headcount decreased 21.5%. District FTES decreased 12 percent over the last five years, while CFE FTES increased 7.1%.

These numbers indicate that in a period of declining headcount and FTES, CFE enrollment remained slightly above the district average and FTES were significantly higher than the district average. This data appears to indicate that CFE enrollment will remain strong and may increase within the next five years.

2.2 Program/area data showing the quantity of services provided over the past four years.

The number of unduplicated students served in the CFE program declined from 889 in 2008-2009 to 697 in 2012-2013, while FTES increased from 133.46 to 149.08.

Decreases in unduplicated head count can be explained by budget-related reductions in the number of CFE courses offered annually. The increase in FTES may correspond to fewer employment opportunities in the community and general downturns in the economy. This may mean more students are enrolling in a greater number of courses or as fulltime students. A related issue is that the need to access financial aid may have increased, necessitating heavier course loads.

2.3 Review the five year data on sections offered, faculty ratios, and efficiency data provided on the web link. Comment on trends and how they affect your program.

Sections offered by the District decreased 27.5% from 2008-2009 to 2012-2013. This reflects a 33% decrease in sections offered at the Lancaster campus; a 61% increase in sections offered in Palmdale, and a 66% decrease in sections offered at other sites. During that time, CFE sections decreased 18.6% overall.

The fall PT/FT faculty ratio increased 5.9 % and the spring PT/FT faculty ratio increased 8.8% from 2008-2009 to 2012-2013. During this period the CFE PT/FT fall ratio decreased 71%; the spring ratio decreased 41%.

District efficiency in the fall increased 15.9% and spring efficiency increased 6.7% during the last five years. CFE fall efficiency increased 10.21%. CFE spring efficiency increased 4.0% during the same period.

There is confusion about the significance of efficiency data. Perhaps a better statistic to gather would be class fill rates which account for the number of students enrolled and also present on waiting lists for particular courses. This information might allow better prediction of scheduling needs and identify courses that might need additional sections added.

2.4 Comment on any similarities or differences between race, gender, location, and modality groups in meeting the Institutional Standard of 68% for student success (students earning grades of A, B, C, Pass, or Credit). Identify what actions are planned to address trends and achievement gaps in the current academic year.*

The success of rate of white and Asian students in the District was unchanged over the past five years; 78% and 76 % respectively. The success rate of Asian CFE students declined over the last five years, from 84% to 64%. This rate of decline is troubling. At this point we have no explanation for the decline, but it could be explained by a changing sample size. The success of Mexican/Central or South American students in CFE decreased from 78% to 72% while the district success rate increased from 68% to 72% between 2008-2009 and 2012-2013. While this downward trend is disturbing, it matches the overall AVC success rate. Success rates for White CFE students decreased from 78% in 2008-2009 to 71% in 2012-2013. The success of American Indians/AK Native students in CFE decreased from 75 to 36 %, however there were two years within that five year period where the success rate was 100%. The sample size for both Asian and American Indian/AK students is quite small.

73 % of female CFE students were successful in 2008-2009, which was better than the District total of 69%. In 2012-2013, 66% of female students were successful; a rate below that of the District rate of 71%. 72% of males students in CFE were successful compared to 68% in the District for 2008-2009. 46% were successful in 2012-2013 as compared to 69% in the District. These rates should be interpreted with great caution as the sample size for male CFE students is very small. It is possible that since an increase in CFE FTES has been noted, and possibly explained by lack of economic resources, more students are juggling a greater course load without a corresponding increase in personal or social support. Students may be handling more personal stress without the resources to deal with the stress effectively.

Student success by location has changed little in recent years. Palmdale students achieved 66 % success in 2012-2013, a rate slightly lower than the 68% Institutional Standard for the District. That same year Lancaster students achieved a success rate of 70% and students in Other/Unknown locations achieved 80% success. Success rate in CFE by location indicate 63% of CFE students in Lancaster were successful and 67% of Palmdale CFE students were successful, slightly below the Institutional Standard of 68%. The success rate in Palmdale has improved over the last four years from 54% to 67%. The success rate for other locations has increased from 61% in 2008-2009 to 70% in 2012-2013.

Students taking traditional courses in the district exceed the Institutional Standard of 68%. 2012-2013 CFE student success in traditional courses fell slightly below the Standard at 66%. The prior four years, students were above the Standard at 75% for two years, 73% for one year, and 69% for the fourth year.

Students taking online courses in the district have not achieved the Institutional Standard of 68% success in any of the past five years. CFE online students also achieved success rates below the Institutional Standard of 68%, averaging 54 % over the past five years.

Anecdotal observations by CFE instructors reveal that students are increasingly struggling with college level English skills. That appears to be especially true for ESL learners. It also appears fewer students entering the program are prepared to work at the college level. Instructor comments reveal they continue to observe students lacking basic study skills and appropriate dispositions for learning. Setting appropriate English prerequisites, increased communication regarding student learning services, and supporting opportunities for students to learn or refresh basic study skills may be indicated.

2.5 Trends in student progression through basic skills courses, if applicable. N/A

2.6 Degrees and certificates currently offered in the discipline.

Degrees granted by the District decreased 29.9% from 2008-2009 to 2012-2013. Degrees in CFE have remained consistent with the exception of the 2012-2013 year where only eight degrees were awarded. In the previous 5 years the number of degrees awarded were as follows; 16, 13, 12, 15, and 18 on 2011-2012.

One explanation for the decrease in CFE degrees granted may be that as course offerings decreased due to budget, students were not able to complete graduation requirements at previous rates. Anecdotal evidence, based upon conversations with individual students, suggests some students have taken courses at College of the Canyons or online at other institutions because equivalent courses were unavailable at AVC. Of particular concern is that CFE 202, the second practicum course required for graduation, is presently offered only during Spring semester. Students may need to wait more than two semesters before space in the course becomes available. Since CFE 201 is a prerequisite for CFE 202, students are often at end of their program before qualifying for CFE 202. An alternate explanation may be that when public-funded early childhood programs such as Head Start began requiring bachelor's degrees for teachers, students transferred to four year institutions prior to obtaining an associate degree in CFE.

2.7 Using the data provided by web link, please comment on transfer rates to four-year institutions, license exam results, and job placement/post testing. If applicable, cite examples of using additional resources (e.g. human, facilities/physical, technology, financial, professional development) or making other changes during the past four years that have resulted in

improvements in transfer rates to four-year institutions, license exam results, and job placement/post testing.

No specific data was found for CFE.

2.8 Career Technical Education (CTE) programs

Labor market and career information from California Department of Education projections indicate that employment totals over a ten year period will increase to 12% by the year 2020. These projections account for an expected increase in administrators of early childhood programs, preschool teachers, and teacher assistants. Resources available through LAUP Child Development Work Force Initiative Grant should support growth in the CFE program overall. (See 4.2)

Part 3 – Outcome Analysis and Use

3.1 Changes in student learning outcome (SLO) and program learning outcome (PLO) assessment findings over the past five years.

In Fall 2012, CFE requested and received \$2,700.00 in Prop 20 funding, based upon SLO/PLO assessment. Allocated funds were spent on clay for practicum courses, updated children's literature examples for CFE 104, plus DVD resources for use in several courses. Since most of these resources were received near the end of Spring 2013 and are being used for the first time in Fall 2013, no formal assessment has yet occurred. Some instructors have commented that use of the new DVDs seems to have added to students' understanding of developmental principles and concepts.

Learning outcomes improved from 2008-2009, when findings were first entered, to aggregate rates as high as 100% in Fall 2012. There was a modest decline in Spring 2013. After discussion, faculty agreed to examine results from the next academic cycle before predicting trends. Achievement targets were raised in most courses beginning Spring 2013, so it is likely this change is related to the decline we observed.

3.2 Changes in operational outcomes (OO) findings over the past five years. N/A

Part 4 - Stakeholder Assessment

4.1 Assessment of how well the program serves the needs of the students, district, and community.

Child and Family Education (CFE) is the study of child development and developmentally appropriate practices for young children. The CFE program is closely linked to the AVC Child Development Center, where CFE students are employed as student assistants and also complete course assignments and fieldwork.

Career paths chosen by CFE students commonly include infant/toddler and preschool teaching or program administration. CFE faculty have played an active role in the CA Community College Curriculum Alignment Project (CAP). By participating in the CAP process, we were able to provide valuable input about course revisions and to establish eight lower division courses now accepted for inclusion in the CID. CFE faculty revised key CFE courses and the courses are now in the approval process. These revisions have strengthened career pathways for CFE students.

Stakeholders in the CFE program include local program facilitators from Head Start, Department of Education State Preschool Children's Centers, Los Angeles Universal Preschool (LAUP), Lancaster and Palmdale School Districts, Regional Occupational Programs, Child Care Resource Center, Children's

Bureau, SPA 1, and faculty from AVC's Social and Behavioral, and Health Sciences Divisions. An often overlooked group of stakeholders are private programs such as faith-based, corporately sponsored, and family-based childcare and education programs. Representatives from several of these programs sit on the Child Development Mentor Selection Committee and the Foster and Kinship Care Advisory Committee.

Additionally, a partnership between AVC's CFE program and the Palmdale School District Head Start DAP (Developing a Partnership) program has been in existence for several years. Each year CFE instructors teach 12 core units (CFE 101, 102, 103, and 106) at the Palmdale School District Early Childhood Offices for parents of children enrolled in Head Start. The purpose is to develop future Head Start employees and to provide parents with skills and opportunities that will enrich relationships between home and school. These classes are open to all AVC students.

On a regular basis, directors of private programs contact CFE faculty for help in recruitment of employees. The AVC Child Development Center regularly hires practicum students as classroom assistants or substitute assistants. So far this semester, five of the Fall 2013 CFE 201 practicum students have received employment offers from the AVC CDC or private and community-funded programs.

Recent developments in the field of early education point to a critical need for a more qualified and educated workforce of early childhood teachers:

- Head Start has increased teacher qualifications. By the end of 2013, at least 50% of Head Start teachers must hold a baccalaureate or advanced degree in a major related to early childhood education.
- The National Association for the Education of Young Children (NAEYC) has established a 2020 deadline to require that 75% of all teachers in NAEYC accredited programs hold a relevant baccalaureate degree. Fifty percent of the Associate Teachers employed in these programs will be required to work towards an associate or higher degree.
- The California Commission on Teacher Credentialing (CTC) is considering a recommendation to establish a P-3 credential with an emphasis in Early Childhood Education. This step will change the Multiple Subjects Credential requirements as well as the Child Development Permit requirements at the Teacher level. This emphasis would give special attention to skills such as literacy and language, special needs, and effective teaching skills for California's diverse cultural and racial population. Nearly every other state provides a specific authorization for teaching at the early childhood/ elementary level (grades P-2, 3, or 4) and many have recommended California do the same.

CFE faculty participate in dialog on the aforementioned issues in state committee meetings and advisories such as CA Community College Early Childhood Educators (CCCECE), CA Early Childhood Mentor Teacher Program (CECMTP), Partnership for Infant/Toddler Caregiving (PITC), L.A. County Office of Education (LACOE), ASPIRE (stipend program in support of ECE excellence), Connections for Children, and First 5 LA. As a result of this participation, the CFE faculty maintain currency in the field and are able to re-evaluate and revise course and program requirements that will prepare students for changes in the workplace.

The Child and Family Education program was recently awarded a Child Development Work Force Initiative Grant through Los Angeles Universal Preschool (LAUP) which will expand opportunities for current and future CFE students. Goals of this grant include:

- Expanding the ECE workforce through development of an educated, more diverse population
- Giving participants access to financial and educational support
- Providing assistance in the CA Child Development Permit application process

- Providing counseling, mentorship, and tutorial support

Overall, Antelope Valley CFE graduates are quite influential in public early care and education programs throughout the Antelope Valley. When employment rosters from the AVC Child Development Center and the Lancaster and Palmdale School District Early Childhood Education Programs are compared to data from AVC's CFE program, indications are that of 223 CFE graduate or transfer students, 41 are employed by the Palmdale School District, 37 by the Lancaster District, and four serve as the Early Childhood Specialists in the AVC Child Development Center. Of these 223 students, at least 22 have earned B.A. or B.S. degrees in CFE-related fields. Of those 22, 11 have completed M.A. or M.S. degrees. Three former students, with recently acquired master's degrees, have shadowed fulltime CFE instructors, with the intent of gaining experience in college level teaching. One of those students is now employed as an adjunct instructor in AVC's CFE program.

Employment data from private early childhood programs has not recently been collected. Based upon anecdotal observations, several local private and corporate early childhood care and education programs count current and former AVC CFE students as employees.

Current CFE students were surveyed to determine self-reported learning related to course objectives, program SLOs/PLOs, National Association for the Education of Young Children (NAEYC) Associate Degree Standards, obstacles to class attendance and successful assignment completion, their needs for further information, and characteristics of the student population. Surveys were administered to a cross section of students attending courses in both Palmdale and Lancaster, during all time slots, and in introductory (CFE 101, 102, 106), mid level (CFE 104 and 105), and upper level (CFE 115 and 201) courses.

Student survey results from Palmdale courses have not been received due to circumstances presently beyond our control. Still to be tabulated is data from three Palmdale courses. This information may be significant in assessing the needs of both CFE students attending courses in Palmdale and the CFE program overall. We hopeful of receiving that data by end of the semester. What follows is the information currently available. Once data is available from the remaining surveys, faculty will analyze the new data, examine trends, and adjust the findings in the following table.

Based upon anecdotal observations, faculty perceptions indicate students struggle to succeed or persist in coursework due to both lack of social support and lack of academic readiness. The survey questions regarding personal characteristics and obstacles were meant to partially evaluate those perceptions. While 30% of respondents identified themselves as first generation college students and 21% identified transportation as an obstacle to attendance and successful assignment completion, results were not as overwhelming as expected and may not support faculty perceptions. It is also true that better design of future surveys will provide a more accurate assessment of those areas.

Forty percent of students surveyed indicate they are seeking employment as preschool teachers. 41% of respondents identified obtaining an AA as their educational goal, while 40 % agreed their goal was transfer to a four year program. These results indicate the need to strengthen resources in the area of academic and career counseling for CFE students.

Out of 115 students surveyed:

The following characteristics best describe me:	Single parent	7.6%
	First generation college student	30%
	Some prior college experience	16%
	Planning a new career	16%
	College graduate	1%

	Hold a Child Dev Permit	7%
The greatest obstacles to regular class attendance and successful completion of assignments is:	Child care	12%
	Transportation	21%
	Finances	20%
	Computer Access	.07%
	Reading ability	.03%
	Writing ability	.08%
	Math ability	.06%
	Lack of study skills	24%
	Social-emotional support	.05%
I would like more information on:	Financial Aid	15%
	Scholarships	25%
	Student Services at AVC	19%
	CFE Career Opportunities	35%
	Completing an Ed Plan	12%
My preferred start time for CFE classes is:	Before 12:30 p.m.	55%
	Between 12:30 and 3:45 p.m.	40%
	Between 3:45 and 7 p.m.	21%
I prefer to attend class in:	Lancaster Only	57%
	Palmdale Only	14%
	Either Lancaster or Palmdale	24%
I prefer to attend classes that meet:	1X week for 3 hour	43%
	2X week for 1 1/2 hours	51%
My current educational goal is:	Complete 12 CFE units	10%
	Complete 33 unit CFE certificate	15%
	Complete AA in CFE	41%
	Transfer to accredited 4 yr institution	40%
	Other	.07%
My current career goal is:	Preschool teacher	40%
	Elementary teacher	16%
	College instructor	0.01%
	ECE supervisor or director	14%
	Social services	19%
	Nursing or other medical	0.05%
	Other	18%

Students were asked to rate their ability to use and access library resources, the Learning Center, and the Child Development Center:

- 78 of 115 students (67%) strongly agreed or agreed they are able to access library resources for the completion of course assignments.
- 76 of 115 students (66%) strongly agreed or agreed they were able to access services at the AVC learning Center.
- 82 of 115 students (71%) strongly agreed or agreed they use the AVC Child Development Center as a convenient campus resource for completing course assignments.
- 86 of 115 students (74%) strongly agreed or agreed that the AVC Child Development Center is a program that demonstrates best practices they are learning about in CFE courses.

Students were also asked to rate the degree to which they believed they had achieved the knowledge, skills, and ability to apply information related to course objectives, CFE SLOs/PLOs, and NAEYC Associate Degree Standards:

- 90 of 115 students (78%) strongly agreed or agreed that they could explain the importance of obtaining a Child Development Permit.
- 82 of 115 students (71%) strongly agreed or agreed that they could state how to apply for a Child Development Permit.

This information is communicated in CFE core courses. Faculty agree that 100% of students completing the CFE program should recognize the importance of the permit and make application or be ready to apply. Student self-assessments administered in CFE 201 and 202 practicum courses will now reflect this emphasis and will measure these components in capstone courses.

- 65 of 115 students (56%) strongly agreed or agreed that they could describe at least three characteristics of a professional.

This information is communicated in CFE 101, an entry level course. Based upon these results it is clear this information should be reviewed and re-emphasized in other CFE courses. Faculty will discuss how to do this in the Spring 2014 department meeting.

- 77 of 115 students (66%) strongly agreed or agreed they could identify uses of the NAEYC Code of Ethical Conduct.
- 77 of 115 students (66%) also strongly agreed or agreed they could use the NAEYC Code of Ethical Conduct.

CFE 101 SLO#2 and PLO#5 assess student's knowledge and abilities in this area. The SLO has been consistently met since first assessment in 2009-2010. The first assessment of PLO #5 occurred in Fall 2012. Because PLO success is assessed in both CFE 201 and 202 (capstone courses), and 202 is currently only offered spring semester, there is insufficient data to determine success of these areas at present.

- 68 of 115 students (59%) strongly agreed or agreed they could discuss at least three child development theories.

Faculty teaching CFE 201 and 202 observed that students nearing the end of the CFE program were still struggling to appropriately identify and apply child development theories. For this reason, a study guide and theoretical matrix are now required as part of the CFE 201 Learning Plan project. These additions require that students apply major theories to the observations they are documenting and activities they are planning as part of the project. The rubric used to evaluate the project has been adjusted to reflect this requirement.

- 89 of 115 students (77%) strongly agreed or agreed they could apply developmentally appropriate practice to evaluation of programs and curriculum.
- 85 of 115 students (73%) strongly agreed or agreed they could successfully complete individual child observations.
- 79 of 115 students (68%) strongly agreed or agreed they could communicate the diverse needs of children and families.
- 81 of 115 students (70%) strongly agreed or agreed they could identify child and family resources in the community.

Part 5 - Goals and Objectives

5.1 **Goals identified in most recent comprehensive self-study report and last year's annual report.**

Goal#1: Offer more CFE coursework both online and face to face that will allow CFE students to obtain the CFE certificate and the CD Permit that are required for employment.

Objective: Revise current CFE certificate to better reflect program needs and align with CA Community College System. Develop online coursework that will align CFE program with other community colleges.

Progress: No additional online coursework has been developed. Discussion has occurred regarding the possibility of offering CFE 109 and 110 online. Faculty is hesitant to add other courses online for two reasons: 1- Student success in online courses is lower than in face to face courses. 2- We believe that because most professionals in the field are required to interact interpersonally with a variety of people (children, parents and families, administrators, etc.) face to face courses allow greater opportunity to practice and observe these types of interactions.

More CFE course sections have been added to the course schedule. CFE courses were offered during Summer 2013 for the first time in several years. 29 course sections were offered in Fall 2013, while 36 course sections are being offered in Spring 2014.

While the current CFE certificate has not been revised, several courses were revised in order to meet transfer model curriculum requirements. Fall 2013: An additional component to be explored is the creation of a 12 unit CFE core certificate. Since unit completion requirements are far lower in private versus public programs, this certificate would provide students desiring employment in family childcare or as assistants and teachers in private programs, an option demonstrating completing of core requirements.

Goal #2: Hire a full time instructor to facilitate and encourage student success and retention, seek new grant opportunities, participate in faculty discourse, and develop and teach face to face and new online courses.

Objective: Expand the CFE Department grant opportunities as well as provide online and face to face instruction that will enhance and expand the CFE department's ability to serve CFE students and the greater teaching community of the Antelope Valley.

Progress: Due to budget constraints this goal has not been met. The award of an LAUP Work Force Initiative (WI-FI) grant in Fall 2013 will provide funding that may begin to address this goal. With the emphasis on developing a fully functional CFE program in Palmdale, meeting this need is crucial. At present, all three full time instructors are teaching course loads divided between three Palmdale sites: Palmdale Center, Palmdale SD Early Childhood Offices, and Palmdale School District Multi-Use facilities as well as in Lancaster. Students deserve a more permanent presence than we are able to provide under present circumstances. This also leaves CFE offices on main campus empty several days each week, making it difficult to supervise students assigned to fieldwork in the Child Development Center and to meet with teachers who are mentoring them. Hiring a fulltime instructor with an office in Palmdale would allow more consistent development of CFE resources at the Palmdale site and would provide greater support to CFE students and adjunct faculty at that site.

Goal #3: Develop a CFE program handbook and post it online by Spring 2013.

Objective: A handbook would provide useful information for majors such as suggested course sequence, requirements for employment in early childhood programs, information on obtaining

the California Child Development Permit, program philosophy and outcomes, and general guideline for the online courses offered in the discipline.

Progress: First established in 2009, this goal still has not been met. Faculty members met the beginning of October to formulate a list of documents to be revised and/or included in the handbook. (See 5.2 Goal #1)

5.2 Discipline/area goals and objectives related to improving outcome findings and/or the success of the various learner populations in completing courses, certificates, degrees, and transfer requirements.

Current Goal #1: Develop CFE program handbook and post it online prior to summer 2014. (See 5.1 Goal #3)

- Guided by EMP Goal #1

Supporting data: Increase student success and retention rates to meet or exceed District levels. Current rates lag below District levels.

Objectives: CFE faculty meet twice a month to plan, develop, and compile the handbook. Each faculty member will be responsible for a specific section of the handbook. Handbook should cover CFE program certificate and diploma requirements, Program Learning Outcomes (PLOs), the matriculation process, the suggested course sequence, campus student service resources, dispositions for learning, career options, volunteer opportunities, Livescan and TB clearance requirements, CA Child Development Permits, and the CA Mentor Teacher Program.

Current Goal #2: Request prerequisite validation studies for specific courses; set English prerequisites as indicated.

- Guided by EMP Goal #1

Supporting data: Faculty survey and discussion indicate that reading and writing levels continue to impede student's progress in successfully completing course assignments. CFE success and retention rates lag below District levels.

Objectives: Request validation studies for ENGL 99 prerequisite for CFE 102 and 104; ENGL 101 for CFE 105. If validated, set prerequisites. A related objective is examining the feasibility of paired CFE and English or Math courses. An obstacle to this objective may be that the number of students available to take paired courses at the same level may not be sufficient to support the concept.

Current Goal #3: Develop educational and career counseling specific to the field of early childhood education. This would allow students to explore opportunities in the field and to better prepare for advanced education and/or employment in the field.

- Guided by EMP Goal #2

Supporting data: Student surveys from Fall 2013 indicated that at least 35% of students desire information about career opportunities in the field. 40% plan to transfer to a 4 year institution. Increasing educational requirement for ECE teachers in public funded programs and the possibility of an early childhood emphasis credential being developed, make this an important goal.

Objective: Designate a specific counselor on campus to work with students in attaining their educational and vocational goals.

Current Goal #4: Develop the full CFE program, including additional fulltime faculty and office space, with a dedicated classroom, technology, and CFE curriculum resources at Palmdale Center. This will maximize opportunities for students and provide a learning environment that more greatly equates to that of students enrolled in courses on the Lancaster campus, where a dedicated classroom with technology and CFE curriculum resources are available. At present, some courses are offered at alternate sites in Palmdale that do not possess the technological resources available to students completing equivalent courses in Lancaster. There is no dedicated Palmdale classroom offering an appropriate environment or sufficient storage space. (See 5.1, Goal #2; 5.3, Goal #1)

- Guided by EMP Goal # 1; EMP #5; President's Goal #4

Supporting data: Faculty surveys have identified several needs in order to offer the CFE program fully at Palmdale Center. Four out of six survey respondents commented upon the need for a dedicated classroom with locked storage for curriculum resources, access to water, and tables and chairs rather than student desks. All four respondents teach courses in Palmdale.

Objective: Secure the necessary human and material resources to support offering 33 units of CFE courses, necessary for completion of the certificate, over the course of two years at Palmdale Center.

Current Goal #5: Develop a comprehensive program assessment plan under the guidance of the Dean of Institutional Effectiveness, Research, and Planning. Seek to answer some of the questions articulated in the CFE Fall Annual Update Profile. (Fall 2012 Profile, Section 9)

- Guided by EMP Goal # 1; EMP Goal #5; President's Goals # 1, #3

Supporting data: Closer identification of students needs and interaction of course and program outcomes should facilitate improved success and retention.

Objective: Develop student surveys to be administered each semester in order to identify emerging needs and answer current questions. Correlate surveys with SLO/PLO assessment. Explore following a group of students through a longitudinal study that would allow gathering data from the time students enter CFE courses through transfer or degree completion and eventual employment. Meet with DIERP to develop surveys and research approach. Gather data and analyze at regular intervals.

Long Term Goal #1: Develop a demonstration lab school/child development center in conjunction with the Palmdale Center. This would allow students completing CFE courses in Palmdale a convenient, high quality opportunity to complete course observations and fieldwork. It would also provide childcare opportunities for staff, faculty, and students at the Palmdale Center and increase high quality childcare options in the community.

- Guided by EMP Goal #1; EMP Goal #5

Supporting data: CFE program and transfer model curriculum require specific coursework in observation and assessment.

Objectives: Begin work with CDC Director to establish a vision for the project and review licensing requirements. Investigate sites and sources of funding.

5.3 Discipline/area goals and objectives directly related to advancing Strategic Goals.

Current Goal #1: Develop a fully functional classroom dedicated to CFE courses at Palmdale Center. Classroom to include locked storage for curriculum materials, supplies, and equipment; access to water/sink; tables and chairs rather than student desks. (See 5.1, Goal #2; 5.3 Goal #4)

- Guided by EMP Goal #1

Supporting data: Faculty surveys identified this as a need. (See 5.3. Goal #4)

Current Goal #2: Develop a designated demonstration lab classroom (Lancaster campus) that would provide CFE students with the opportunity to experiment with learning environments and materials. Program approaches such as High Scope, Waldorf, and Reggio Emilia are not represented in the Antelope Valley. A demonstration lab would allow students to experience materials and environmental characteristics of these approaches and also provide training and demonstration opportunities for community partners/ early childhood programs throughout the Antelope Valley. This lab would also provide computers for student use and space for tutoring and course/career advisement during hours scheduled by the department.

- Guided by EMP #1 and EMP #6

Supporting data: Many CFE courses require program observation, assessment, and application of theory to environment and curriculum design. The lab would allow students to experiment with environmental design and curriculum approaches, furthering their understanding of applying theory to practice. The lab would also provide space for course/career advisement and tutoring.

Objective: Identify appropriate space on campus, preferably adjacent to the Child Development Center. Faculty meet to develop room plans and list of needed resources. Explore funding opportunities, including grants, that would support the purchase of equipment, supplies, and other resources.

Part 6 - Resource Needs

6.1 Human Resources

Current:

1. Two fulltime CFE faculty; one specifically dedicated to developing and supporting the CFE program in Palmdale. (5.2 Goal #4)
2. One classified employee to staff the resource lab and support clerical needs of the Child Development Workforce Initiative Grant. (5.3 Goal #2)
3. College supported Livescan clearances for CFE 105 students. CFE students are currently Livescanned once enrolled in CFE 201 Child Development Practicum. Obtaining clearances earlier in the course sequence would allow CFE 105 students to complete course projects in AVC Child Development Center Classrooms. This would give CFE students a more authentic curriculum development experience, enrich curriculum opportunities for both children enrolled at the Center and CDC Child Development Specialists, and also allow students who may need to file a Livescan Exemption the opportunity to obtain an Exemption prior to enrolling in CFE 201 for supervised field experience. (Livescan clearance is a Limitation on Enrollment for both CFE 201 and 202) Livescan clearance completed during enrollment in CFE 105

would facilitate student success and retention and provide smoother transition through the CFE course sequence. (Relates to 5.2, Current Goals #1 and #3; ILOs #2, 4, 6; CDC OOs #1, 2)

Near Term:

1. Reinstating the Infant Toddler classroom at the AVC Child Development Center. There are very limited opportunities for CFE students to observe infants in high quality settings within the Antelope Valley. CFE 101, 102, 120, 122, and 150 emphasize infant observations to fulfill course observation assignments. CFE 120, 122, and 150 are courses specific to infant/toddler development and learning experiences. Reinstatement of the Infant Toddler classroom would increase student success and retention by supporting more frequent offering of Infant/Toddler coursework. Six units of Infant/Toddler coursework are required for the CA Child Development Permit Infant/Toddler specialization. It would also increase opportunity for lab classroom-based observation, experience, and mentorship in a high quality Infant/Toddler program. (Relates to 5.2, Current Goal #1; ILOs# 2,4,6; CDC OOs #1, 2)

6.2 Technology

1. Internet access and specialized software for use in the AVC Child Development Center. This would allow CFE students to view in "real time" activities and learning experiences taking place in the CDC classrooms and provide a common source of child and classroom observation opportunities. Schools and childcare centers are increasingly becoming "off limits" to our students due to security and liability issues. Enhancing student observation opportunities on campus is increasingly important for this reason.

AVC Child Development Center data reveals greatly increased use of the Child Developmental Center for student observations. There were a total of 500-750 observations completed at the Child Development Center from 2008-2011, 943 completed during 2011-2012, and 1,204 completed during 2012-2013. Since all CFE courses require some form of observation, many students would benefit from this expenditure. (Relates to EMP Goal #7; CDC OOs #1, 2)

2. Three laptop computers, one printer, and charging stations, as well as a locked cabinet for storage of this equipment. Funding is available through the Work Force Initiative grant. This equipment would be installed in a dedicated resource lab. (5.3 Goal #2; EMP Goal #7)

3. ELMO or document camera for CDC 127 classroom. This allows viewing of many resources collected from schools and community agencies as part of both instructor and faculty presentations. Many documents are not available online or electronically. (Relates to EMP Goal #7)

6.3 Facilities/physical resources

1. Table to be used in CFE 127 for instructional materials and demonstrations. A table similar or the same as those used for student seating would support instructor demonstration needs. (CFE courses specify Demonstration as a Method of Instruction on Course Outlines of Record.)

2. Dedicated CFE classroom with access to water, student tables and chairs, and locked storage at Palmdale Center. (See 5.1, Goal #2; 5.3 Goal #4)

3. Dedicated office space for CFE program at Palmdale Center. (See 5.1, Goal #2; 5.3 Goal #4)

4. Space, furnishings, materials, and equipment for the proposed CFE Demonstration Lab. (ILOs #2, 4, 6; EMP #1)

6.4 List needed professional development resources in priority order. Identify which discipline/area goal(s) guides this need.

6.5 List any other needed resources in priority order. Identify which discipline/area goal(s) guides this need.

Part 7 - Recommendations and Comments

7.1 Recommended changes to the Educational Master Plan

None

7.2 Changes in program review process

As mentioned previously, significance of efficiency data is questionable. Class fill rates are indicators of the number of students enrolled and also present on waiting lists for particular courses. This information might allow better prediction of scheduling needs and identify courses that might need additional sections added.

Comprehensive Program Review Self-Study Report

Health & Sciences / EMT course

2013

Part 1 - Division or Area Overview

1.17 Briefly describe how the division or area contributes to the district mission.

1.18 Place an "X" by each Institutional Learning Outcome (ILO) supported by the division or area.

___ Analyze diverse perspectives from a variety of disciplines and experiences that contribute to the development of self-awareness.

x Value and apply lifelong learning skills required for employment, basic skills, transfer education, and personal development.

___ Demonstrate a breadth of knowledge and experiences from the humanities, social and behavioral sciences, arts, natural sciences, and mathematics.

___ Solve problems using oral and written communication, critical thinking and listening skills, planning and decision-making skills, information literacy, and a variety of technologies.

___ Demonstrate good citizenship and teamwork through respect, tolerance, cultural awareness, and the role of diversity in modern society.

x Identify career opportunities that contribute to the economic well-being of the community.

1.19 After completing Parts 2-7, prepare a one page summary of the division/area. Interpret the significance of the findings. Note successes in supporting district strategic goals and where improvements are needed.

1.20 Lance Hodge

1.21 Lance Hodge

I found no data specific to the EMT course which seemed relevant to include, except for enrollment numbers each semester for decades indicating a high student demand for this course.

Part 2 - Data Analysis and Use

2.1 Please review the five year headcount and FTES enrollment data provided on the web link. Comment on trends and how they affect your program.*

In the past five years District FTES decreased 12 percent, while during that same period EMT Course FTES decreased by 62%.

The EMT program continues to consistently show maximum enrollment in all sections. The EMT program suffered drastic cuts due to past budget concerns, and for the past several years has been operating with the minimum number of sections possible, causing a loss of our adjunct instructor pool. From 2008-2009 to 2012-2013 the EMT course dropped from 206 students to only 74 students, a decrease of 64%. This course has consistently demonstrated maximum enrollment numbers since 1992, even when several other sections were available and five adjunct instructors were teaching.

In order to meet student demand the EMT course should add several new sections and reemploy several adjunct faculty. The loss of EMT courses to our community also impacts the continuing need for EMTs in the Antelope Valley and the ability to employ many of our students with our local ambulance services.

- 2.2 Report and analyze program/area data showing the quantity of services provided over the past four years (e.g. number of students served, books sold, employees hired, acreage maintained).

For the past five years AVC has shown a 29.1% decrease in overall headcount, while the EMT program enrollment has maintained maximum enrollment. The EMT course continues to be a high demand course offering rapid employment opportunities for students in the Antelope Valley. The continued cut back to EMT course enrollment, despite a budget that has moved toward normalcy, has now caused a significant loss of our dedicated and experienced adjunct faculty pool. EMT sections should be added and the adjunct pool reestablished.

- 2.3 Please review the five year data on sections offered, faculty ratios, and efficiency data provided on the web link. Comment on trends and how they affect your program.

For the past five years AVC has shown a 29.1% decrease in overall headcount, while the EMT program enrollment has maintained maximum enrollment. The EMT course continues to be a high demand course offering rapid employment opportunities for students in the Antelope Valley. The continued cut back to EMT course enrollment, despite a budget that has moved toward normalcy, has now caused a significant loss of our dedicated and experienced adjunct faculty pool. EMT sections should be added and the adjunct pool reestablished. Annual sections offered declined from 22 in 2008-09 to 8 in 2012-13. Sections offered by the district decreased 27.5% from 08-09 / 12/13. During those same years EMT sections decreased 64%. There are no adjunct instructors in the program at this time, although faculty ratios for EMT in 08-09 were 2.15 for fall and 1.65 for spring. District efficiency increased 16 % in the fall and 7% in the spring from 2008-2009 to 2012-2013. During that time EMT efficiency increased 22% in the fall and 53% in the spring.

- 2.4 Using the discipline student success data provided by web link, please comment on any similarities or differences between race, gender, location, and modality groups in meeting the Institutional Standard of 68% for student success (students earning grades of A, B, C, Pass, or Credit). Identify what actions are planned to address trends and achievement gaps in the current academic year.*

Success by race in the district is below the institutional standard of 68% for 2012-2013. Success by race for EMT students has declined for 08-09 and 2012-2013 with no race meeting the institutional standards of 68% except Pacific Islander.

Although fluctuations, sometimes wide, in student success are occurring, the consistency of instruction in the course and of course materials would seem to indicate that such fluctuations are due to natural variations in the student population rather than with elements within the course. Similarly, persistence and retention variations in the course are most likely the result of those same natural variations in student population. Regarding race, gender, location, and modality groups; it is significant that black/African American students show a college-wide lower success rate compared to all other races identified. The EMT course seems to reflect this trend as well. No race-specific adjustments have been made or are anticipated in the EMT course.

Student success in the EMT course have been historically low compared to general success statistics. In 08-09 69% of female students in the district were successful compared to 33% of EMT students. In 2012-2013 the district rate was 71% success vs. 10% for the EMT course. The district's 08-09 success rate for males was 68%, the EMT course rate was 33%. In 2012-2013 69% of males in the district were successful vs. 28% success for EMT students.

Student success in this course is largely a factor of preparation prior to entering the college environment (study skills), maturity, self-motivation, and critical thinking skills. It is rare for successful students in this course to receive a grade of 'C', as those students are most often

unable to achieve a passing score on the final exam. Because this course has a job-training focus, and the role of the EMT is one where maturity, self-motivation, and critical thinking skills are essential, the low success rate has the effect of filtering out those students who cannot demonstrate those qualities in the application of their course work. Steps toward improving success rates with variations in teaching methods and strategies and the incorporation of innovative approaches will ultimately fall short when dealing with students who don't possess the maturity to appreciate long-term career goals, the self-motivation to push themselves beyond their expectations of the amount of study time required in this course, and the critical-thinking skills that allow them to synthesize information useful in scenario type questions and skills scenario practice. Although success rates are anticipated to continue reflecting the trends we have seen for many years, actions are taken each semester to help students better succeed. With the Fall 2013 semester we have incorporated the use of 'student notebooks' that are checked weekly in which students create a chapter-by-chapter summary of important topics and data from their textbooks. This notebook is designed to encourage the regular and scheduled reading of the textbook as well as to serve as a study guide when reviewing for exams. This Fall semester we have also encouraged and expanded the use of YouTube to review EMT skills procedures. We are continuing and expanding the requirement of 'return demonstrations' of lecture and skills topics in both the lecture and lab classes to encourage students to better develop their speaking and presentation skills and to work on those important principles of maturity, self-motivation, and critical thinking, especially under the pressure of a group setting. At some point a 'standard' for student success set too high may not reflect the reality of what is possible when put in practice. A significant and sustainable increase in student success rates would most likely require a significant change in the student population entering the class, through the development of course prerequisites. In our last review we considered the prerequisite of a 'Medical Terminology' course to change our student population and perhaps increase student success. My personal experience reflects my ability to enter a community college EMT course without such prerequisites, which served as the beginning of a long and successful career in Emergency Medicine. This experience causes me to hesitate on the implementation of such prerequisites that could ultimately eliminate students such as myself early on who might have never entered the field if such prerequisites were in place. I continue to believe that it is important to have this course open to the general student population, allowing access to this important job training opportunity to all, even though that approach will open us to the fluctuations in success we have experienced. Our final exam, and its emphasis on scenario based questions, requires a significant synthesis of course material into real-life critical thinking skills, which further eliminates students unable to rise to that level. Again, this job-training course seeks to discover those students who demonstrate maturity, self-motivation, and honed critical thinking skills for the important job of Emergency Medical Technician.

- 2.5 Analyze and summarize trends in student progression through basic skills courses, if applicable.

NA

- 2.6 List degrees and certificates currently offered in the discipline. Analyze how resource adjustments or other changes during the past four years have impacted degree and certificate completion rates.

This section does not apply to the EMT course, as the college does not offer a certificate approved by the college and Chancellor's Office in EMT.

The EMT course can lead to National certification as an EMT. Budget reductions have caused a drastic reduction in sections offered, leading to fewer students completing the course and taking the National EMT exam.

- 2.7 Using the data provided by web link, please comment on transfer rates to four-year institutions, license exam results, and job placement/post testing. If applicable, cite examples of using additional resources (e.g. human, facilities/physical, technology, financial, professional

development) or making other changes during the past four years that have resulted in improvements in transfer rates to four-year institutions, license exam results, and job placement/post testing.

The NREMT results for 2013-14 are reported by:

- 2.8 Career Technical Education (CTE) programs: Review the labor market data on the California Employment Development Department website for jobs related to your discipline. Comment on the occupational projections for employment in your discipline for the next two years. Comment on how the projections affect your planning.
<http://www.labormarketinfo.edd.ca.gov/Content.asp?pageid=1011>

EMT job growth is expected to continue with population growth. The 2010-2020 projections show an expected 42.1% increase in employment opportunities for EMT's, with annual job openings of 990 positions.

Part 3 – Outcome Analysis and Use

- 3.1 Analyze changes in **student learning outcome (SLO)** and **program learning outcome (PLO)** assessment findings over the past five years. Cite examples of using data during that time as the basis for resource allocation (e.g. human, facilities/physical, technology, financial, professional development) or making other changes that resulted in or correlate with improved learning outcome findings over the past four years.*

SLO data as a measure to determine improvements in student success is of limited value in this course. The assumption is that higher and higher student success goals can be reached. This assumption has the natural flaw of assuming we can change those factors that contribute to student success, many of which occur prior to the student entering the college environment. As an example, this EMT course could achieve higher success rates if we manipulated course prerequisites to filter out, or filter in, certain students. Students who have taken more and higher academic courses have most likely developed better study skills, and those with a specific introduction to biology or medical terminology will have an advantage over those who have not. Students who are better readers will most likely have an easier time studying for the EMT course. If our goal is simply higher student success numbers, such changes to the student population through implementation of prerequisites could achieve that. I believe there is great value in offering a course like the EMT course where virtually ANY student has the opportunity to complete career-track training in just one semester. Many of our students are desperate to improve their employment situation for themselves and their families and to enter a career they can be proud of. Even though many of our students will not successfully complete the course, they are introduced to the reality of a college-level learning environment and are reminded of the importance of maturity and self-motivation during their training. Students who repeat the course often show drastic improvements in both levels of maturity and self-motivation. I believe the value in such an open student population for this course outweighs the disadvantage of low student success data.

- 3.2 Analyze changes in **operational outcomes (OO)** findings over the past five years. Cite examples of using data during that time as the basis for resource allocation (e.g. human, facilities/physical, technology, financial, professional development) or making other changes that resulted in or correlate with improved OO findings over the past four years.*

NA

Part 4 - Stakeholder Assessment

- 4.1 Assess how well the program serves the needs of the students, district, and community. Support statements with findings from student, employee, and/or community surveys. Include feedback

from other sources if relevant (e.g. advisory committees, employers in the community, universities, scores on licensure exams, job placement).

The EMT course is not required to have an advisory committee. Student surveys were not done during this cycle.

Part 5 - Goals and Objectives

- 5.1 Review the goals identified in your most recent comprehensive self-study report and last year's annual report. Indicate which have been completed and which have been eliminated.*

Goals for this course are centered on envisioning and implementing new ways to motivate students and to make lecture and lab topics impactful, memorable, and educational. A major problem in the EMT program is in motivating students to do the required work. A detailed course schedule lays out the student study regime but the majority of students fail to follow it.

Every semester there is greater emphasis on more exposure to curriculum topics through classroom review and student questioning.

1. Return demonstrations of EMT skills learned the prior week have been increased.
2. Students are now required to maintain a student notebook to help encourage and check on student reading assignments.
3. Reviews of previous lecture and lab material are initiated in every lecture and lab class with students required to explain past topics to the entire class.
4. Greater use of internet technology has been ongoing to reinforce both lecture and lab topics and is assisted by the new classroom technology in the Health & Sciences building.

These goals are ongoing and subject to continued review on how best to achieve them. Previous goals and procedures for achieving them have been maintained and enhanced.

- 5.2 List discipline/area goals and objectives related to **improving outcome findings and/or the success of the various learner populations** in completing courses, certificates, degrees, and transfer requirements. Discipline/area goals must be guided by district Strategic Goals and Plan Summaries in the Educational Master Plan (EMP). They must be supported by an outcome action plan, data analysis, national or professional standards, and/or a requirement or guideline from an outside agency (e.g. legislation, Chancellor's Office, accrediting body, professional board). Consider curriculum, instruction, assessments, program services, operations, collaborations, scheduling, location, technology, etc.*

This course, as all classes, revolves around AVC Educational Master Plan goal #1, to provide students with an educational environment which supports learning and facilitates student success. This course meets the requirements of the Los Angeles EMS Agency for training of EMT's. EMT training is one of the basic requirements for the job of firefighter, and is required to progress toward paramedic training. EMT is also a stand-alone career certification that allows entry into jobs with ambulance services and hospital emergency departments as well as other first aid and emergency care environments.

Although, as previously discussed, our success rates are generally low, the EMT course continues to offer a rich environment in which students can learn valuable career skills and are encouraged and motivated to succeed. Many successful EMT students now work in the field of Emergency Medicine and have entered into a career path with many options open for their future. Our former students work on ambulances, are firefighters, paramedics, nurses, and physician assistants. This course, like so many difficult classes, requires the student to dig deep into themselves and connect to the important traits of maturity, self-motivation, and critical thinking to succeed.

- 1g. This is a high demand class with immediate job potential and could be increased by adding additional sections to better meet that demand.

2c. As noted, this course serves to introduce many students to other opportunities for higher education and trains them in many important skills to achieve those opportunities.

5. The college has a wonderful new Health & Sciences building and a dedicated EMT classroom which could be more effectively and efficiently utilized by adding additional EMT sections.

5b. The EMT course has taken seriously past requests to conserve funds; this was especially important during times of financial distress. The EMT program had a long history going back decades, and prior to the current staffing of the EMT program, of accumulating disposable supplies. We have used many of those supplies during these times of budget shortfalls to achieve large budget reductions for the past several years. As those supplies are now nearing depletion the EMT course will renew a more sustainable budget position, requiring renewed periodic purchasing of such supplies. It is hoped that over time the EMT budget will be increased to reflect the need for such renewed spending, appreciating our deep cuts during the college's fiscal challenges.

- 5.3 List discipline/area goals and objectives **directly related to advancing Strategic Goals.** Discipline/area goals must be guided by district Strategic Goals and Plan Summaries in the Educational Master Plan (EMP). They must be supported by data analysis or other documentation.

Along with the general college master plan #1, in which the EMT course provides a high quality learning environment and works to facilitate student success, an important aspect of the EMT course is in providing general students the important opportunity to enter the college environment and be exposed to the often rigorous requirements necessary to achieve their goals. Master plan goal 1g. would also necessitate the addition of more classes to meet the high student demand for this course. The EMT course, in striving to impart important qualities of maturity, self-motivation, and critical thinking into the learning process, fills an important need toward future success. This goal is aligned with the college master plan goal 2c, and is important in that the entire student population in the EMT course can benefit, those who successfully complete the course as well as those who do not. Even those students who are unsuccessful in the course are likely to continue their college and career pursuits with a new or revitalized appreciation of those qualities which are so important to success generally.

Current (up to three years)

Goal: Continue to provide students a supportive learning environment in which they have the opportunity to succeed in their career goals, and increase class offerings to accommodate high student demand.

- Guided by district Strategic Goal(s) #_1 & 1g.____

Part 6 - Resource Needs

Identify significant resource needs that should be addressed currently (up to three years), near term (three to five years), and long term (five to ten years). If there may be safety issues, enrollment consequences, or other important concerns if a resource is not provided please make this known.*

With the opening of the new Health & Sciences building the college has taken a huge step forward in supplying an improved learning environment for students. With the high quality technology in every classroom the opportunity to enrich the curriculum content is enormous. The EMT program has benefited greatly from the college's vision and our administration's support. As noted previously the EMT budget will

need some modest increases over time to recover from years of budget cuts and to address more stable budget practices in the future.

- 6.1 List needed human resources. List titles in priority order. Identify which discipline/area goal(s) guides this need.

Budget cuts for the past several years have resulted in the elimination of our adjunct instructor pool. Reinstating enrollment levels to previous levels will require adding from 1 to 3 adjunct instructors, depending on class schedule structure and adjunct availability.

- 6.2 List needed technology resources in priority order. Identify which discipline/area goal(s) guides this need.

The Health & Sciences building utilizes a computerized door locking/unlocking system which has resulted in some rooms being unlocked automatically when instructors are not present. All rooms contain expensive computer and audio/visual equipment and some lab rooms contain expensive and potentially dangerous equipment that requires instructor supervision. This practice of automatically unlocking room doors creates an unnecessary risk for theft of equipment and poses the risk of danger to unsupervised students. This door locking system has also removed the ability of instructors to immediately lock their room doors in the event of a dangerous person or persons on campus, further exposing both instructors and students to an unnecessary danger. Several letters regarding this problem have been forwarded to all interested parties on campus with no response or acknowledgement. A simple and immediate fix would be to simply stop the automatic unlocking, leaving doors locked to outside entry. It seems that an expensive and sophisticated computerized entry control system could all instructors the ability to immediately lock their room door as needed.

The EMT lab classes are unable to conduct outside scenario practice because the room door cannot be locked when the instructor and students are outside, leaving student belongings unsecured.

- 6.3 List facilities/physical resources (remodels, renovations, or new) needed to provide a safe and appropriate student learning and/or work environment. List needs in priority order. Identify which discipline/area goal(s) guides this need.

None

- 6.4 List needed professional development resources in priority order. Identify which discipline/area goal(s) guides this need.

Instructors in the EMT course should attend the annual EMS Agency meetings to remain current in latest procedures and practices regarding EMT programs and EMT regulation changes. These meetings are mandatory for the Program Director or Program Clinical Coordinator.

- 6.5 List any other needed resources in priority order. Identify which discipline/area goal(s) guides this need.

None

Part 7 - Recommendations and Comments

- 7.1 List recommended changes to the Educational Master Plan to:

- Address external issues or mandates such as legislation, industry, and professional standards, etc.
- Respond to outcome findings.
- Reflect changes in technology, methodology, and/or disciplines.
- Address student achievement gaps and/or meet other student needs.

None

7.2 What changes in the program review process would improve institutional effectiveness or make the results more helpful to the program?

None

Comprehensive Program Review Self-Study Report: Submitted October 22, 2013 by Sandra Hughes, RN, MN

Please provide the following information. Respond NA to questions which are not applicable to your division/discipline/area. The self-study reports of all divisions/areas will include responses to Parts 1-7. Self-study reports of academic divisions will include a division overview in Part 1 and analysis of each discipline in Parts 2-7.

Questions with an asterisk (*) were addressed in last year's program review report. The question numbers do not correspond with the numbers in last year's report.

Division/Area Name Health Sciences: Medical Office Assisting Program

Year: October 31, 2013

Part 1 - Division or Area Overview

1.22 Briefly describe how the division or area contributes to the district mission.

1.23 Place an "X" by each Institutional Learning Outcome (ILO) supported by the division or area.

___ Analyze diverse perspectives from a variety of disciplines and experiences that contribute to the development of self-awareness.

☒ Value and apply lifelong learning skills required for employment, basic skills, transfer education, and personal development.

___ Demonstrate a breadth of knowledge and experiences from the humanities, social and behavioral sciences, arts, natural sciences, and mathematics.

☒ Solve problems using oral and written communication, critical thinking and listening skills, planning and decision-making skills, information literacy, and a variety of technologies.

☒ Demonstrate good citizenship and teamwork through respect, tolerance, cultural awareness, and the role of diversity in modern society.

☒ Identify career opportunities that contribute to the economic well-being of the community.

1.24 After completing Parts 2-7, prepare a one page summary of the division/area. Interpret the significance of the findings. Note successes in supporting district strategic goals and where improvements are needed.

1.25 Name of person leading this review: Sandra Hughes, RN, MN

1.26 Names of all participants in this review: Hilda Barkate, RN and Paularita Bossier, RN, Joanne Stoll, RN and Karen Stenback, RN.

Part 2 - Data Analysis and Use

The following data is provided on the Program Review website. Additional data is available from the Department of Institutional Research and Effectiveness (DIERP).

Longitudinal data

District headcount and FTES

Division headcount and FTES

Discipline headcount and FTES

Number of sections offered by location/distance education

PT/FT faculty ratio by LHE
Efficiency (measured as FTES/FTEF)

Data about student progress

Student achievement: success, retention, and term to term persistence
Progression through remedial courses
Program completion
Degree/certificate completion rate
Transfer rates to 4-year institutions
Licensure exam results
Job placement/post training

All division/areas will complete Parts 2-7. In academic divisions Parts 2-7 will be completed by each discipline; please identify the discipline:

Medical Office Assisting/Clinical Medical Assisting

- 2.1 Please review the five year headcount and FTES enrollment data provided on the web link. Comment on trends and how they affect your program.*

The program served 238 students in 2012-13. Enrollment in the discipline peaked in 2008-09 when 305 students were enrolled in MOA courses, but the budget crisis of 2008-09 resulted in a decrease in offerings in the discipline which lowered the number of students enrolled. In 2010-11, the number of students enrolled rebounded to 270. Primarily this was due to the fact that the MOA skills courses have only been offered every other year. The number of students enrolled is rebounding due to increased sections offered, including two section of MOA 110, Beginning Medical Office Assisting Skills, in 2013-14. This is the first time in 12 years that two sections of MOA 110 have been offered. Of course, the pattern of FTES followed the trends of unduplicated headcount.

- 2.2 Report and analyze program/area data showing the quantity of services provided over the past four years (e.g. number of students served, books sold, employees hired, acreage maintained).

The section count in the MOA discipline followed the budget crisis pattern. The peak in section count occurred in 2008-09 when 15 sections of MOA courses were offered. Then the number of sections declined in 2009-10 when the MOA skills courses were not offered. The number of section increased in 2010-11 and in 2011-12 when the MOA skills courses were offered and then the number of sections declined in 2012-13 when the skills courses were not offered.

- 2.3 Please review the five year data on sections offered, faculty ratios, and efficiency data provided on the web link. Comment on trends and how they affect your program.

Refer to response for section 2.2 regarding the total number of sections offered.

One or two sections of MOA 101, Beginning Medical Terminology, have been offered at the Palmdale Center in most fall and spring semesters since 2007. In 2010-11, four sections of MOA 101 were offered in Palmdale and eight sections of various MOA courses were offered in Lancaster because the college had a full-time health sciences instructor who needed to make load while the Radiologic Technology program was being developed. The sections filled to capacity in 2010-11, which demonstrates that the discipline can support a full-time faculty member.

Two or three sections of MOA 101 have been offered online annually. Budgetary considerations affected the number of sections that were offered. MOA 101 is the only course in the discipline that has been approved as an online or hybrid course.

There is no full-time faculty in the MOA discipline, although the discipline could support a full-time faculty member, according to the number of students enrolled.

- 2.4 Using the discipline student success data provided by web link, please comment on any similarities or differences between race, gender, location, and modality groups in meeting the Institutional Standard of 68% for student success (students earning grades of A, B, C, Pass, or Credit). Identify what actions are planned to address trends and achievement gaps in the current academic year.*

Student success for Hispanic and Non-Hispanic students has exceeded the institutional standard every year for the past five years. Students whose ethnicity is “unreported” do not succeed at the level of the institutional standard. Without more information about the students in this category, more action cannot be taken for individuals. However, the faculty is committed to the success of every student who enrolls in the MOA courses.

The success of female and male students is fairly equal. Student success in MOA courses has been above the institutional standard for the past five years and it has increased, reaching 80% for females and 82% for males in 2012-13.

Student success at the Palmdale Center was 42% in 2007-08, which was substantially lower than student success at the Lancaster campus (77%). By 2012-13, student success at both locations was approximately the same: 82% at the Lancaster campus and 79% at the Palmdale Center.

Student success in the online MOA 101 course has exceeded student success in traditional courses for the past five years.

Students who are American Indian/Alaska Natives, African American or Pacific Islanders have had lower success rates than white, Mexican/Central American or “other” students. Tutoring and basic skills courses would probably assist students with low success rates, according to the instructors in the discipline.

When analyzed by ethnicity, students who are Hispanic had a higher retention rate than non-Hispanic students in 2012-13. In other years included in this report, student retention of Hispanic students was approximately the rate of success in non-Hispanic students. Male students had a retention rate of 94% in 2012-13, which was higher than the retention rate for females (89%). Retention of both male and female students exceeded the institutional standard of 60%. Retention at Palmdale lagged retention at the Lancaster campus until 2012-13 when the retention rate was equal.

Retention in the online classes in MOA has been in the 87 to 96th percentile, much higher than the District's retention rate of 79%.

The retention rate for American Indian/Alaska Natives and African American students has been lower than the retention rate for Pacific Islander, Whites and Mexican/Central American students by up to 23%.

Term to term persistence of students in MOA has varied. The variance probably is due to the course offering pattern, as the skills courses in the discipline have only been offered every other year.

- 2.5 Analyze and summarize trends in student progression through basic skills courses, if applicable.

Not applicable

- 2.6 List degrees and certificates currently offered in the discipline. Analyze how resource adjustments or other changes during the past four years have impacted degree and certificate completion rates.

One or two degrees have been awarded annually in MOA over the past five years, but up to four degrees have been awarded in Clinical Medical Assisting. One to two certificates have been awarded annually over the past five years. Completion of the program is certainly an emphasis that needs to be addressed. It is noteworthy that students who take the MOA courses can also elect to be awarded the Administrative Medical Assistant degree or certificate and one to three students annually choose this option.

- 2.7 Using the data provided by web link, please comment on transfer rates to four-year institutions, license exam results, and job placement/post testing. If applicable, cite examples of using additional resources (e.g. human, facilities/physical, technology, financial, professional development) or making other changes during the past four years that have resulted in improvements in transfer rates to four-year institutions, license exam results, and job placement/post testing.

Medical Office Assisting is not a transfer degree option. However, students report that they take the MOA 101 course so that they will be more successful in transfer and CTE curricula, including anatomy and physiology, nursing and EMT.

- 2.8 Career Technical Education (CTE) programs: Review the labor market data on the California Employment Development Department website for jobs related to your discipline. Comment on the occupational projections for employment in your discipline for the next two years. Comment on how the projections affect your planning.

<http://www.labormarketinfo.edd.ca.gov/Content.asp?pageid=1011>

Statistics for the Los Angeles County on occupational projections of employment for a 10 year projection (2010 to 2020) are:

Estimated Employment: 23,370 Projected: 28,380

Estimated Change: Number 5,010 Percent: 21.4

Annual Average Openings: 860

Part 3 – Outcome Analysis and Use

- 3.1 Analyze changes in **student learning outcome (SLO)** and **program learning outcome (PLO)** assessment findings over the past five years. Cite examples of using data during that time as the basis for resource allocation (e.g. human, facilities/physical, technology, financial, professional development) or making other changes that resulted in or correlate with improved learning outcome findings over the past four years.*

Over the last 3-4 years the 3 SLOs for all MOA courses have been meet above the 70% target. PLOs have been achieved at the 100% level, which is higher than the target.

- 3.2 Analyze changes in **operational outcomes (OO)** findings over the past five years. Cite examples of using data during that time as the basis for resource allocation (e.g. human, facilities/physical, technology, financial, professional development) or making other changes that resulted in or correlate with improved OO findings over the past four years.*

Not applicable

Part 4 - Stakeholder Assessment

- 4.1 Assess how well the program serves the needs of the students, district, and community. Support statements with findings from student, employee, and/or community surveys. Include feedback from other sources if relevant (e.g. advisory committees, employers in the community, universities, scores on licensure exams, job placement).

Community: It has been difficult to collect data for job placement and students who actually take the California State Examination for certificate certification. However, there has been a recent change in the hiring practices within the community which is now employing medical office assistants, with a clinical focus vs. licensed vocational nurses. Should this trend continue, it would be most supportive to the community to continue the program with a focus on state certification.

Also, students taking MOA 101 and 102 range from 16 to 65 years of age and are trying to get into the work force or they are retraining for employment. Since most of the hospitals and clinics in the area require medical terminology, as a hiring requirement, it is most advantages to continue said program. It is also a transferable course to other educational institutions, should the student decide to continue their education.

Part 5 - Goals and Objectives

5.1. Goal: Reassess the viability of the Medical Office Assisting courses 110 and 111 and the program as a college level program using the Educational Program Evaluation and Discontinuance Procedure in conjunction with the Academic Senate.

Objective: Determine whether the program is viable or whether students would be served better by having the clinical medical assisting program offered in Corporate and Community Services or in the Health Sciences Division now that the new Health and Science building is completed.

Completion Status: Consensus of the faculty was to continue the program in the new Health Science Building.

5.1. Goal: Restore discipline budget that was cut in 2010-2011.

Objective: To restore a supply budget for the MOA program of \$1000.

Completion Status: Prop 20 money was used to fund the program.

5.2 List discipline/area goals and objectives related to **improving outcome findings and/or the success of the various learner populations** in completing courses, certificates, degrees, and transfer requirements. Discipline/area goals must be guided by district Strategic Goals and Plan Summaries in the Educational Master Plan (EMP). They must be supported by an outcome action plan, data analysis, national or professional standards, and/or a requirement or guideline from an outside agency (e.g. legislation, Chancellor's Office, accrediting body, professional board). Consider curriculum, instruction, assessments, program services, operations, collaborations, scheduling, location, technology, etc.*

Current (up to three years)

Goal #1: A specific target: **To update the course curriculum to meet the new Medical Office Assisting guidelines by the State of California for 2014 – 2015.**

- Guided by district Strategic Goal(s) # 1
- Supporting data: Review of the labor market data as referenced in section 2.8 supports the need to prepare students for the state certification in order to compete in the job market.
- Objectives: (1) Revise current curriculum to mirror the recommended California State Curriculum, (2) educate faculty to the new course curriculum, and (3) increase budget to support the new changes in said program.

Goal #2: A specific target: **To increase discipline budget to support the revisions made to current curriculum in order to meet the California State Curriculum.**

- Guided by district Strategic Goal(s) # 1
- Supporting data: An increase in the budget of \$5,000 would support the changes that would be needed to meet the State of California Curriculum with regards to equipment and audio visual aids. This would certainly strengthen and enhance student success outcomes.
- Objectives: (1) Hold a community Advisory Meeting to gain perspective of medical office assistance's roles and responsibilities in the community setting and (2) revise current curriculum to meet the recommended California State.

Goal #3: A specific target: **To increase the FTEF for the discipline (MOA 110 and 111) with a part-time employee (RN or LVN faculty) or full-time instructor in the discipline so that the ratio of students to faculty is decreased during the skills lab hours for student's skills competency practicum.**

- Guided by district Strategic Goal(s) # 1
- Supporting data: Currently the enrollment for MOA 110 and 111 fluctuates between 15- 25 students per course. With an addition 0.5 FTEF the student ratio would be more manageable for skills competency check-offs and facilitate student learning. The hours for the additional 0.5 FTE would be (1) MOA 110: 1-3pm 8 weeks and (2) MOA 111 1- 3pm 15 weeks.
- Objectives: To improve student retention and outcomes, it would be advantageous to lower the student/faculty ratio. Students would have more individual attention from faculty.

- 5.3 List discipline/area goals and objectives **directly related to advancing Strategic Goals.** Discipline/area goals must be guided by district Strategic Goals and Plan Summaries in the Educational Master Plan (EMP). They must be supported by data analysis or other documentation.

None identified

Part 6 - Resource Needs

Identify significant resource needs that should be addressed currently (up to three years), near term (three to five years), and long term (five to ten years). If there may be safety issues, enrollment consequences, or other important concerns if a resource is not provided please make this known.*

- 6.1 List needed human resources. List titles in priority order. Identify which discipline/area goal(s) guides this need.

Full-time faculty to lead the program (MOA Goal #3)
Adjunct faculty to assist with skills lab assignments. (MOA Goal #3)

MOA 111: Additional faculty (RN/LVN adjunct) for skills lab coverage 1-3pm (1day per week x15 weeks) (MOA Goal #3)

MOA 110: Additional faculty (RN/LVN adjunct) for skills lab coverage 1-3pm (1day per week x 8 weeks) (MOA Goal #3)

New FTEF 0.5 needed to provide the additional requested hours. (MOA Goal #3)

6.2 List needed technology resources in priority order. Identify which discipline/area goal(s) guides this need.

Equipment (all related to MOA Goals #1 & 2):

1. I Clickers
2. Accu-check monitors (2)
3. Temporal thermometers (2) and ear thermometers (2)
4. Injection training manikins (5)
5. Baby dolls to use for demonstration of measuring and weighing (5)
6. Speculums (3) various sizes
7. Instruments: scissors and hemostats for setting up procedure trays

Supplies (All related to MOA Goals #1 & 2): the necessary supplies for injections, wrapping procedure trays, blood glucose testing, temperatures, testing hemoglobin, and urinalysis.

Audio Visual Aids (All related to MOA Goals #1 & 2): update videos/CDs on Office Safety, Office Emergencies, Office Procedures, Communications with Clients and Documentation.

6.3 List facilities/physical resources (remodels, renovations, or new) needed to provide a safe and appropriate student learning and/or work environment. List needs in priority order. Identify which discipline/area goal(s) guides this need.

None

6.4 List needed professional development resources in priority order. Identify which discipline/area goal(s) guides this need.

- (1) Clinical faculty training on equipment (MOA Goal #1)
- (2) Training/review of the state model curriculum for California state certification. (MOA Goal #1)

6.5 List any other needed resources in priority order. Identify which discipline/area goal(s) guides this need.

None

Part 7 - Recommendations and Comments

7.1 List recommended changes to the Educational Master Plan to:

- Address external issues or mandates such as legislation, industry, and professional standards, etc.
- Respond to outcome findings.
- Reflect changes in technology, methodology, and/or disciplines.
- Address student achievement gaps and/or meet other student needs.

None

7.2 What changes in the program review process would improve institutional effectiveness or make the results more helpful to the program?

None

Comprehensive Program Review Self-Study Report

Division/Area Name – Health Sciences/Nutrition and Foods

Year – 2013-14

Part 1 - Division or Area Overview

1.27 Briefly describe how the division or area contributes to the district mission.

1.28 Place an "X" by each Institutional Learning Outcome (ILO) supported by the division or area.

X_ Analyze diverse perspectives from a variety of disciplines and experiences that contribute to the development of self-awareness.

X_ Value and apply lifelong learning skills required for employment, basic skills, transfer education, and personal development.

X_ Demonstrate a breadth of knowledge and experiences from the humanities, social and behavioral sciences, arts, natural sciences, and mathematics.

X_ Solve problems using oral and written communication, critical thinking and listening skills, planning and decision-making skills, information literacy, and a variety of technologies.

X_ Demonstrate good citizenship and teamwork through respect, tolerance, cultural awareness, and the role of diversity in modern society.

_X Identify career opportunities that contribute to the economic well-being of the community.

1.29 After completing Parts 2-7, prepare a one page summary of the division/area. Interpret the significance of the findings. Note successes in supporting district strategic goals and where improvements are needed.

1.30 Name of person leading this review – Ann Volk

1.31 Names of all participants in this review – Rona Brynin

Part 2 - Data Analysis and Use

2.1 Please review the five year headcount and FTES enrollment data provided on the web link. Comment on trends and how they affect your program.*

Annual headcount dropped 28% from 2008-09 to 2011-12. It has increased 10% from 2011-12 to the latest figure in 2012-2013. FTES dropped 21% from 2008-09 to 2011-12. It has increased 15% from 2011-12 to 2012-2013. Overall, the Nutrition and Foods area had a significant decline in the past years due to the budget, but has had a recent increase. However, the latest numbers are still lower than was reported at the beginning of this 5 year review. Head counts also increased in the past year due to the Nutrition and Foods area moving into the Health Science building. The classrooms are larger in this building allowing for an increase in enrollment per section.

2.2 Report and analyze program/area data showing the quantity of services provided over the past four years (e.g. number of students served, books sold, employees hired, acreage maintained).
N/A

2.3 Please review the five year data on sections offered, faculty ratios, and efficiency data provided on the web link. Comment on trends and how they affect your program.

Sections offered have decreased by 34% from 2008-09 to 2011-12. From 2012-13 it has increased by 9%. Faculty ratio and efficiency ratio reflected these changes in sections offered. Efficiency ratio decreased 33% from 2008-09 to 2011-12, but increased 25% from 2011-12 to 2012-13. The trend had been a decrease in sections offered, however, there has been a slight increase in the last year. Changes in both faculty ratio and efficiency data will continue to change due to the move into the Health Science building. As mentioned earlier, the classrooms are larger, therefore, allowing more student enrollment per class.

- 2.4 Using the discipline student success data provided by web link, please comment on any similarities or differences between race, gender, location, and modality groups in meeting the Institutional Standard of 68% for student success (students earning grades of A, B, C, Pass, or Credit). Identify what actions are planned to address trends and achievement gaps in the current academic year.*

Success rates show a consistent trend. Asians and Whites tend to have the highest success rate; Asians a high of 87% in 2009-10 to a low of 60% in 2012-13. Whites, 82% in 2009-10 to 69% 2007-08. Blacks have consistently had the lowest success rates, 45% in 2009-12 to 40% in 2012-13. American Indians and Mexican/S. Americans tend to have similar success rates. American Indians 73% in 2010-11 to 55% in 2012-13; Mexican/S. Americans 74% 2009-10 to 64% 2012-13.

Females consistently have higher success rates than males. Females 70% in 2009-10 to 61% in 2012-13. Males success rate varied from 61% in 2010-11 to 49% in 2012-13.

The Lancaster campus success rates consistently rate higher than the Palmdale campus.

Lancaster varied from 69% in 2009-10 to 60% in 2012-2013. Palmdale varied from 63% in 2011-12 to 54% in 2012-13.

Traditional mode of teaching has consistently had a higher success rate than online courses. In 2009-10 the success rate for traditional was 69% but dropped to 58% in 2012-13. Online courses had a success rate of 66% in 2011-12 but dropped to 56% in 2012-13.

Actions have been taken in the last few years to address the gap in success rates. Online courses now have online office hours so as to provide students with the opportunity to obtain assistance from the teacher. Tutors have been available for students in NF 100, 102 and 150. Discussions have been held between NF instructors and the Learning Center regarding having more support at the Palmdale campus.

- 2.5 Analyze and summarize trends in student progression through basic skills courses, if applicable.
N/A

- 2.6 List degrees and certificates currently offered in the discipline. Analyze how resource adjustments or other changes during the past four years have impacted degree and certificate completion rates.

In 2011-12, two degrees were offered. Other years, it was either none or one. A new course, NF 103-Principles of Food Preparation was offered fall 2013 for the first time. This now increases the number of NF classes to five – NF 100, 102, 103, 110 and 150.

- 2.7 Using the data provided by web link, please comment on transfer rates to four-year institutions, license exam results, and job placement/post testing. If applicable, cite examples of using additional resources (e.g. human, facilities/physical, technology, financial, professional development) or making other changes during the past four years that have resulted in improvements in transfer rates to four-year institutions, license exam results, and job placement/post testing.
N/A

- 2.8 Career Technical Education (CTE) programs: Review the labor market data on the California Employment Development Department website for jobs related to your discipline. Comment on the occupational projections for employment in your discipline for the next two years. Comment

on how the projections affect your planning.

<http://www.labormarketinfo.edd.ca.gov/Content.asp?pageid=1011>

No CTE programs for Nutrition and Foods were identified.

Part 3 – Outcome Analysis and Use

- 3.1 Analyze changes in **student learning outcome (SLO)** and **program learning outcome (PLO)** assessment findings over the past five years. Cite examples of using data during that time as the basis for resource allocation (e.g. human, facilities/physical, technology, financial, professional development) or making other changes that resulted in or correlate with improved learning outcome findings over the past four years.*

SLO outcome assessment findings had dropped over the past five years. For the NF 100 course, the achievement rate averaged 85% during the first 3 years, then dropped to 79% last year. One reason is due to the method of analysis used. For the first 3 years of this assessment period, NF instructors were basing SLO data only on students that completed the assignment. The last 2 years, it was changed so that SLO data was based on all students enrolled in the class, regardless if they turned in the assignment or not. Also, in comparing SLO results among instructors, it was noted that there was a wide variance of results. In the past years, it had varied from 55-84% of students that achieved the target. To correct this variance, faculty had met numerous times to develop a standard assignment and rubric. Fall 2013 will be the first time all instructors will use the same guidelines and scoring system to assess the SLO in the NF 100 course.

- 3.2 Analyze changes in **operational outcomes (OO)** findings over the past five years. Cite examples of using data during that time as the basis for resource allocation (e.g. human, facilities/physical, technology, financial, professional development) or making other changes that resulted in or correlate with improved OO findings over the past four years.*
- N/A

Part 4 - Stakeholder Assessment

- 4.1 Assess how well the program serves the needs of the students, district, and community. Support statements with findings from student, employee, and/or community surveys. Include feedback from other sources if relevant (e.g. advisory committees, employers in the community, universities, scores on licensure exams, job placement).

In the Family and Consumer Studies Advisory Meeting, students identified the need for consistent counseling for the students who want to transfer to universities to pursue a career as a dietician. Three students who attended the meeting were enrolled in three different majors (biology, FCS, and Liberal Studies: Math & Sciences). None felt that they were adequately advised.

Part 5 - Goals and Objectives

- 5.1 Review the goals identified in your most recent comprehensive self-study report and last year's annual report. Indicate which have been completed and which have been eliminated.*

The goal in the last Comprehensive Program Review was to develop and implement an Associate Degree in Nutrition. This goal has not been met as we are now waiting for the Transfer Degree program to be implemented. Once this is implemented we can move forward with this goal.

- 5.2 List discipline/area goals and objectives related to **improving outcome findings and/or the success of the various learner populations** in completing courses, certificates, degrees, and transfer requirements. Discipline/area goals must be guided by district Strategic Goals and Plan Summaries in the Educational Master Plan (EMP). They must be supported by an outcome

action plan, data analysis, national or professional standards, and/or a requirement or guideline from an outside agency (e.g. legislation, Chancellor's Office, accrediting body, professional board). Consider curriculum, instruction, assessments, program services, operations, collaborations, scheduling, location, technology, etc.*

Current (up to three years)

Goal #1: Increase adjunct faculty by one and provide professional development for all faculty.

- Guided by district Strategic Goal(s) #__1g__

Objectives: Need to hire an additional adjunct instructor & provide professional development for the new adjunct and current faculty.

Goal #2: To develop and implement an Honors course for NF 100

Objective: Obtain information on how to convert the NF 100 course into an Honors course.

- Guided by Strategic Goal # 2

Objective: Obtain information on how to convert the NF 100 course into an Honors course

Near Term (three to five years)

Goal #3: Offer an A.A. degree in Nutrition in conjunction with the Transfer Model Curriculum for Nutrition

- Guided by district Strategic Goal(s) #_2__

Objectives: This will be guided by the creation of the TMC.

- 5.3 List discipline/area goals and objectives **directly related to advancing Strategic Goals**. Discipline/area goals must be guided by district Strategic Goals and Plan Summaries in the Educational Master Plan (EMP). They must be supported by data analysis or other documentation.

Part 6 - Resource Needs

Identify significant resource needs that should be addressed currently (up to three years), near term (three to five years), and long term (five to ten years). If there may be safety issues, enrollment consequences, or other important concerns if a resource is not provided please make this known.*

- 6.1 List needed human resources. List titles in priority order. Identify which discipline/area goal(s) guides this need.

The Palmdale campus needs a full-time OSD staff member who can be available most days of the week to proctor exams. Many students at the Palmdale campus lack transportation and have great difficulty getting to the Lancaster campus in order to take their exams. At the present moment, various staff at Palmdale proctor the exams, but this has proven to be disorganized, unreliable and frustrating for both faculty and students. Also needed in the Palmdale campus are tutors for the Nutrition students. Currently, there are only nutrition tutors on the main campus, and many Palmdale students do not have transportation. This is not a program goal, but it is an identified need that has been directed to the Palmdale Center Director.

- 6.2 List needed technology resources in priority order. Identify which discipline/area goal(s) guides this need.

The Palmdale campus needs a much larger computer lab which will be able to accommodate more students. This is not a program need but it has been directed to the Palmdale Center.

- 6.3 List facilities/physical resources (remodels, renovations, or new) needed to provide a safe and appropriate student learning and/or work environment. List needs in priority order. Identify which discipline/area goal(s) guides this need.

HS109 needs more white board space. Currently, with the slide projector in use, the available white board space is extremely limited. From a safety standpoint, the classroom doors in the new Health Sciences building are not able to be manually locked. If there is a safety threat on campus, faculty are not able to manually and quickly lock the doors to provide shelter to the students and faculty. Also, the doors open to the hallway, so one is unable to block the doors from being opened. The phone has been placed right next to the door, so if one needs to call the Sheriffs in the event of a safety threat, the placement of the phone puts one in clear view of a safety threat.

- 6.4 List needed professional development resources in priority order. Identify which discipline/area goal(s) guides this need.

Funding for attendance at professional conferences would be helpful. (NF Goal #1)

- 6.5 List any other needed resources in priority order. Identify which discipline/area goal(s) guides this need. n/a

Part 7 - Recommendations and Comments

- 7.1 List recommended changes to the Educational Master Plan to:
- Address external issues or mandates such as legislation, industry, and professional standards, etc.
 - Respond to outcome findings.
 - Reflect changes in technology, methodology, and/or disciplines.
 - Address student achievement gaps and/or meet other student needs.
- No recommendations.
- 7.2 What changes in the program review process would improve institutional effectiveness or make the results more helpful to the program?
- None

Comprehensive Program Review Self-Study Report

Division/Area Name: *Health Sciences/Radiologic Technology*

Year: *2013-2014*

Part 1 - Division or Area Overview

1.32 Briefly describe how the division or area contributes to the district mission.

The radiologic technology program contributes to the district's mission by offering "essential career technical instruction... designed to enhance students' knowledge and skills leading to employment, career advancement, certification, and state or federal licensure." The radiologic technology program is a 24- month long course of study that leads to Associate of Science Degree in Radiologic Technology. Graduates become eligible to sit for State and national certification examinations, leading to opportunities for employment in the medical imaging sciences.

1.33 Place an "X" by each Institutional Learning Outcome (ILO) supported by the division or area.

X ___ Analyze diverse perspectives from a variety of disciplines and experiences that contribute to the development of self-awareness.

X ___ Value and apply lifelong learning skills required for employment, basic skills, transfer education, and personal development.

X ___ Demonstrate a breadth of knowledge and experiences from the humanities, social and behavioral sciences, arts, natural sciences, and mathematics.

X ___ Solve problems using oral and written communication, critical thinking and listening skills, planning and decision-making skills, information literacy, and a variety of technologies.

X ___ Demonstrate good citizenship and teamwork through respect, tolerance, cultural awareness, and the role of diversity in modern society.

X ___ Identify career opportunities that contribute to the economic well-being of the community.

1.34 Name of person leading this review

Maria Kelly

1.35 Names of all participants in this review Maria Kelly

Part 2 - Data Analysis and Use

2.1 Please review the five-year headcount and FTES enrollment data provided on the web link. Comment on trends and how they affect your program.*

Annual district headcount decreased 21.9 percent from 2008-2009 to 2012-2013 and during that time, Radiologic Technology headcount increased by 100 percent. District FTES decreased 12 percent in the past five years while Radiologic Technology FTES increased 19.04 percent. Analysis: Increase due to new program starting in 2009. There is a wide variance in the data from semester to semester for the following reasons. 1. State and national programmatic accreditation bodies placed limitations on enrollment. 2. The economic downturn placed limitations on program growth during this period. The program responded by limiting program enrollment to every other year.

2.2 Report and analyze program/area data showing the quantity of services provided over the past four years (e.g. number of students served, books sold, employees hired, acreage maintained).

The radiologic technology program started in 2009. Since starting, the program served 22 total students out of which 15 graduated in two cohorts and a third cohort of nine students is currently progressing towards graduation in 2014. Out of the 15 graduates 14 were employed within six months of graduation in California. 100% of graduates have obtained state and national

certification within six months of graduation. To service this area one full-time faculty/program director has been hired. The number of adjunct instructors varies greatly from semester to semester due to difficulty obtaining and retaining qualified instructors. The full time faculty/program director works an overload each semester to fulfill main bulk of the instructional, managerial and programmatic accreditation needs. The program has obtained Perkins IV grants for several years, enabling the outfitting of a fully energized simulation laboratory. This laboratory enables students to produce x-rays on phantoms (simulators) and process, analysis, transfer and storage digital images, simulating an acute care environment essential to their learning.

- 2.3 Please review the five-year data on sections offered, faculty ratios, and efficiency data provided on the web link. Comment on trends and how they affect your program.

Sections offered by the district decreased 27.5 percent from 2008-2009 to 2012-2013. That reflects a 33 percent decrease in Lancaster sections, a 61 percent increase in Palmdale sections, and a 66 percent decrease in sections offered elsewhere. During that time sections in radiologic technology increased 100% percent. Analysis: Sections increased due to new program beginning in 2009. Sections are expected to remain flat due to limitations on program enrollment by State and national programmatic accreditation bodies. These limitations are based on the availability clinical affiliated educational site and the number of qualified full -time instructors, who can develop and maintain these sites. Currently, the program enrolls one cohort every other year, so there is a slight variation expected semester to semester, due to differing number of sequential courses offered per term. If the program starts enrolling a cohort each year the number of sections is expected to double.

Fall district PT/FT faculty ratio increased 5.9 percent and spring district PT/FT faculty ratio increased 8.8 percent from 2008-2009 to 2012-2013. There is no comparison data from 2008-2009 as this is a new program. The 5-year average PT/FT ratio in radiologic technology is 1.04% for the fall and .91% for the spring. Analysis: The most recent year data is more reflective of current ratios. Fall: .54% and spring: .81%. However, there is a wide variation in the data from semester to semester due to difficulty in obtaining and retaining qualified adjunct instructors. The more realistic expectation would be .50 % ratio (2PT/1FT), even if the number of cohorts increase to 1 ever year (4PT/2FT=.50%), if employee retention remains flat.

District efficiency in the fall increased 15.9 percent and efficiency in the spring increased 6.7 percent over the past five years. There is no data available for 2007/2008 as this was a new program starting in 2009. However from 2009-2010 to 2012-2013 Radiologic Technology efficiency in the fall increased by 1.09 percent and efficiency in the spring increased by .06 percent. Analysis: this data follows the district trends. However, since limitations are placed on program enrollment, the data is heavy dependent on student persistence from semester to semester during the course of the 24-month program. Student retention for each cohort has increased since starting the program; therefor efficiency is expected to increase.

- 2.4 Using the discipline student success data provided by web link, please comment on any similarities or differences between race, gender, location, and modality groups in meeting the Institutional Standard of 68% for student success (students earning grades of A, B, C, Pass, or Credit). Identify what actions are planned to address trends and achievement gaps in the current academic year.*

Race: radiologic technology students across all races achieved higher than the institutional standard of 68%. Students who identify themselves as Asian and unknown (mixed race) achieve the highest success with 100% five-year (district average 78% and 76%) average. Students identifying themselves as American Indian had the lowest success with a 75% five-year average (district average 68%). These patterns, although higher tend to mirror district patterns.

Gender: radiologic students of both genders achieved higher than the institutional standard of 68%. Female students achieved a five-year average of 99% (district average 71%). Male students achieved a five-year average of 97%(district average 68%).

Location: the program is taught only on the Lancaster campus.

Modality groups: all the program courses are delivered traditionally.

Analysis and actions: data trends by race and gender are difficult to analyze due to limitations on enrollment (n=22 total program enrollment as of 2011). However, the data indicates in general that the overall success of radiology students when compared to institutional standards is far superior. This may be due to a variety of reasons including, students' intrinsic motivation, program impact across the state, enthusiastic program support by communities of interest, the availability of current technology in the simulation laboratory and dedicated faculty.

- 2.5 Analyze and summarize trends in student progression through basic skills courses, if applicable. Not applicable.
- 2.6 List degrees and certificates currently offered in the discipline. Analyze how resource adjustments or other changes during the past four years have impacted degree and certificate completion rates.

Degrees granted by the district decreased 29.9 percent from 2008-2009 to 2012-2013. (or decreased by 23.9 percent from 2009-2010 to 2012-2013.)

Associate of Science Degree in Radiologic Technology: The first cohort was enrolled in January 2009 and graduated in December 2010. Since that time one additional cohort has graduated in June 2012. The next cohort is expected to graduate in June 2014. Currently, the enrollment cycle is every other year. The program has limitations on enrollment based on State and national accreditation bodies per cohort. Therefore, program enrollment is expected to stay flat unless the program increases cohort enrollment to every year. If program enrollment does increase to one cohort per year, degrees granted will also increase. National percentage for program completion for similar programs is 79% in 2012(JRCERT.org). Program completion for the last two cohorts has increased from 64% to 80%. Is expected that 90% of the students in the current cohort will graduate in June 2014, therefore degrees granted are expected to increase as enrollment increases and/or program completion increases.

- 2.7 Using the data provided by web link, please comment on transfer rates to four-year institutions, license exam results, and job placement/post testing. If applicable, cite examples of using additional resources (e.g. human, facilities/physical, technology, financial, professional development) or making other changes during the past four years that have resulted in improvements in transfer rates to four-year institutions, license exam results, and job placement/post testing.

Transfer rate is not applicable. 100% of program graduates pass the national registry examination within six months of graduation. The national average = 93% (JRCERT.org). 93% of program graduates obtained employment in the field within six months of graduation. The national average = 88% (JRCERT.org). The high registry examination pass rates are attributed to the following: quality of instruction, availability of current technology the simulation laboratory, enthusiastic support from the programs community of interests, and high student motivation. Although initially within the first few years of the start of the program the labor market downsized; local, state and national labor market trends indicate current and potential future availability of entry-level positions in the field, indicating the potential for increase in job placement of program graduates. See section 2.8 for further discussion.

- 2.8 Career Technical Education (CTE) programs: Review the labor market data on the California Employment Development Department website for jobs related to your discipline. Comment on the occupational projections for employment in your discipline for the next two years. Comment on how the projections affect your planning.

<http://www.labormarketinfo.edd.ca.gov/Content.asp?pageid=1011>

The labor market demand in California for radiologic technologists is anticipated to increase by 23.8% with an average annual job opening of 270 technologists. The program could respond to the increased demand by increasing enrollment. The State and national programmatic accreditation bodies limit each cohort to 10 students per year. Currently the program enrolls a cohort of 10 students every other year. The program could increase enrollment in two ways: 1.

The program could enroll a cohort every year, and/or 2. The program could increase its maximum enrollment by adding additional clinically affiliated sites. Both options are contingent on the hiring of additional full-time and part time faculty.

Part 3 – Outcome Analysis and Use

- 3.1 Analyze changes in **student learning outcome (SLO)** and **program learning outcome (PLO)** assessment findings over the past five years. Cite examples of using data during that time as the basis for resource allocation (e.g. human, facilities/physical, technology, financial, professional development) or making other changes that resulted in or correlate with improved learning outcome findings over the past four years.*

Student achievement as measured by SLOs and PLOs and program effectiveness (external certification examinations, job placement rates, etc.) have remained high (met or exceeded targets) for both graduating cohorts and therefore difficult to correlate to specific resource needs. This may be due to students' intrinsic motivation, program impact across the state, enthusiastic program support by communities of interest, the availability of current technology in the simulation laboratory and dedicated faculty. The few examples of achievement gaps are attributed to instructional methods. The resources provided (e.g. human, facilities/physical, technology, financial, professional development) are the minimum required by the State and national accreditation agencies for the size of the program. Irrespective of learning achievement, if at some future point the college wishes to expand the program (i.e., start a new cohort every year and/or add clinical education affiliates) additional resources, in particular, additional faculty will need to be obtained in order to meet and maintain minimum State and programmatic accreditation requirements. In addition, the continued high achievement necessitates the maintenance of laboratory equipment, the cost of which cannot be funded through grant sources.

- 3.2 Analyze changes in **operational outcomes (OO)** findings over the past five years. Cite examples of using data during that time as the basis for resource allocation (e.g. human, facilities/physical, technology, financial, professional development) or making other changes that resulted in or correlate with improved OO findings over the past four years.*

Not applicable.

Part 4 - Stakeholder Assessment

- 4.1 Assess how well the program serves the needs of the students, district, and community. Support statements with findings from student, employee, and/or community surveys. Include feedback from other sources if relevant (e.g. advisory committees, employers in the community, universities, scores on licensure exams, job placement).

The program serves the needs of students, district and community. The program has an advisory committee that meets twice per year. The advisory committee is comprised of local employers, radiographers, graduates and students. The advisory committee informs the program about community needs. In addition, the program solicits feedback via graduate and employer surveys. On graduate surveys for the past five years graduate overall satisfaction is 93%. On employer surveys for the past five years employer satisfaction is 100%. The five-year pass rate a national certification examination is 100% six months post-graduation. Job placement rate is 93% six months post graduation.

Part 5 - Goals and Objectives

- 5.1 Review the goals identified in your most recent comprehensive self-study report and last year's annual report. Indicate which have been completed and which have been eliminated.*

Completed goals:

1. District funding of state and programmatic accreditation fees.

Eliminated Goals:

2. Internet access to the Radiologic Technology classroom and laboratory

This goal has been moved to the college wide technology plan.

- 5.2 List discipline/area goals and objectives related to **improving outcome findings and/or the success of the various learner populations** in completing courses, certificates, degrees, and transfer requirements. Discipline/area goals must be guided by district Strategic Goals and Plan Summaries in the Educational Master Plan (EMP). They must be supported by an outcome action plan, data analysis, national or professional standards, and/or a requirement or guideline from an outside agency (e.g. legislation, Chancellor's Office, accrediting body, professional board). Consider curriculum, instruction, assessments, program services, operations, collaborations, scheduling, location, technology, etc.*

Current (2013-2016)

Goal 1: Hire full-time faculty member (new)

Guided by district Strategic Goal(s):

#3. The college will expand and diversify career technical education options for students.

Supporting action plan, data analysis, or other documentation:

Supports community outreach, supports increased student enrollment by providing enough faculty to support program enrollment on a yearly basis. Supports programmatic accreditation processes. Supports student learning outcomes by providing another faculty resource in the program. The report of findings from the initial 2010 programmatic accreditation and subsequent 2013 reaccreditation suggested that the program increase the number of full time faculty, however funding has not yet been identified or obtained for a second full-time faculty member.

Objectives: Significant steps or actions needed to achieve the goal

Fund, recruit, and hire.

Goal 2: Develop additional clinical affiliations.

Guided by district Strategic Goal(s):

#3. The college will expand and diversify career technical education options for students.

Supporting action plan, data analysis, or other documentation:

Increasing the number of clinical affiliations will support increase student enrollment in the program, provide community outreach to potential community employers and offer a variety of clinical learning settings for students.

Objectives: Significant steps or actions needed to achieve the goal

The completion of this goal is dependent on the completion of goal #1, hiring additional full-time faculty.

Goal 3: Service/Preventative Maintenance Agreement for energized x-ray laboratory and related imaging equipment.

Guided by district Strategic Goal(s):

#7 The College will increase resources to enhance technology's support of the college mission and processes.

Supporting action plan, data analysis, or other documentation:

This agreement will produce a significant cost savings to the College for maintenance and repairs over the al-the-cart option for service. For example, the cost of a service agreement is typically \$15,000 per year, whereas, the cost to replace one part of the x-ray assembly can be upwards of \$40,000.

Objectives: Significant steps or actions needed to achieve the goal

Fund, negotiate and execute agreement

- 5.3 List discipline/area goals and objectives **directly related to advancing Strategic Goals**. Discipline/area goals must be guided by district Strategic Goals and Plan Summaries in the Educational Master Plan (EMP). They must be supported by data analysis or other documentation.

Goal 1: Hire full-time faculty member (new)

Guided by district Strategic Goal(s):

#3. The college will expand and diversify career technical education options for students.

Supporting action plan, data analysis, or other documentation:

Supports community outreach, supports increased student enrollment by providing enough faculty to support program enrollment on a yearly basis. Supports programmatic accreditation processes. Supports student learning outcomes by providing another faculty resource in the program. The report of findings from the initial 2010 programmatic accreditation and subsequent 2013 reaccreditation suggested that the program increase the number of full time faculty, however funding has not yet been identified or obtained for a second full-time faculty member.

Objectives: Significant steps or actions needed to achieve the goal

Fund, recruit, and hire.

Goal 2: Develop additional clinical affiliations.

Guided by district Strategic Goal(s):

#3. The college will expand and diversify career technical education options for students.

Supporting action plan, data analysis, or other documentation:

Increasing the number of clinical affiliations will support increase student enrollment in the program, provide community outreach to potential community employers and offer a variety of clinical learning settings for students. The labor market demand in California for radiologic technologists is anticipated to increase by 23.8% with an average annual job opening of 270 technologists. The program could respond to the increased demand by increasing enrollment.

Objectives: Significant steps or actions needed to achieve the goal

The completion of this goal is dependent on the completion of goal #1, hiring additional full-time faculty.

Goal 3: Service/Preventative Maintenance Agreement for energized x-ray laboratory and related imaging equipment.

Guided by district Strategic Goal(s):

#7 The College will increase resources to enhance technology's support of the college mission and processes.

Supporting action plan, data analysis, or other documentation:

This agreement will produce a significant cost savings to the College for maintenance and repairs over the al-the-cart option for service. For example, the cost of a service agreement is typically \$15,000 per year, whereas, the cost to replace one part of the x-ray assembly can be upwards of \$40,000.

Objectives: Significant steps or actions needed to achieve the goal

Fund, negotiate and execute agreement

Future (2016-2018)

Goal 4: Classroom Remodel.

Guided by district Strategic Goal(s):

#7 The College will utilize campus resources efficiently and effectively.

Supporting action plan, data analysis, or other documentation:

The current classroom environment is not conducive to students technology needs (i.e. Plugs for laptops and other devices, inefficient student task desks). The classroom lighting and projector needs to be upgraded in order to display medical images.

Objectives: Significant steps or actions needed to achieve the goal

Design, fund and execute.

Part 6 - Resource Needs

Identify significant resource needs that should be addressed currently (up to three years), near term (three to five years), and long term (five to ten years). If there may be safety issues, enrollment consequences, or other important concerns if a resource is not provided please make this known.*

- 6.1 List needed human resources. List titles in priority order. Identify which discipline/area goal(s) guides this need.
 Current term: Goal # 1. Additional full time faculty needed to serve as faculty/program clinical coordinator. The report of findings from the initial 2010 programmatic accreditation and subsequent 2013 reaccreditation suggested that the program increase the number of full time faculty.
- 6.2 List needed technology resources in priority order. Identify which discipline/area goal(s) guides this need.
 Current Term: Goal # 3. Service/Preventative Maintenance Agreement for energized x-ray laboratory and related imaging equipment.

 Goal #3: Replace x-ray tube in the energized lab.
 This needs to be done so that the students can perform their lab experiments. The alternative is to use any available space at one of the two local hospitals, but this solution was not been successful when it was implemented at the program's inception. The students only can use the hospitals' x-ray rooms when patients are not being served. This meant constant interruptions in the learning environment and lack of continuity of teaching.
- 6.3 List facilities/physical resources (remodels, renovations, or new) needed to provide a safe and appropriate student learning and/or work environment. List needs in priority order. Identify which discipline/area goal(s) guides this need.
 Current and near term: None needed. Long term: Goal#4: Classroom remodel (student task desks and instructional aids).
- 6.4 List needed professional development resources in priority order. Identify which discipline/area goal(s) guides this need. None needed.
- 6.5 List any other needed resources in priority order. Identify which discipline/area goal(s) guides this need. None needed.

Part 7 - Recommendations and Comments

- 7.1 List recommended changes to the Educational Master Plan to:
- Address external issues or mandates such as legislation, industry, and professional standards, etc.
 - Respond to outcome findings.
 - Reflect changes in technology, methodology, and/or disciplines.
 - Address student achievement gaps and/or meet other student needs.
- The State continues to propose and enact new legislation for Radiologic Technology. Programmatic accreditation and National curricular changes occur on a 3-year cycle. These changes are needed as the result of new safety concerns as new technology is introduced in the field. The College/Program will need to enhance its ability to react to these changes timely. This includes the ability for faculty to propose and enact more timely curricular updates, to fund and procure new technology resources and maintain existing technology.
- In addition, the program will need to increase program enrollment over the next several years in order to meet the needs of local and State employers based on State employment trends. The College should revise its current staffing plan and procedures in order to respond more appropriately to career/employment trends and predictions.

Updates to classroom facilities need to be addressed continually. A college wide plan that includes faculty and student concerns is needed to address classroom safety, instructional aids, furniture and technology needs across the campus.

7.2 What changes in the program review process would improve institutional effectiveness or make the results more helpful to the program?

The program review cycle could be enhanced in several ways. The timing of the cycle itself could be improved. Program review process, including the needed reporting framework and statistics should start during the summer session and be complete prior to the beginning of the fall session annually. This will allow additional time for thoughtful analysis while many faculty have a reduced instructional load.

Better training of faculty responsible for completing the report is needed. This semester there were several faculty development presentations dedicated to completing the report. These were an excellent beginning. However, Faculty need further instruction on the various data reports available. Specifically needed are definitions of the data elements available, how to make a comparative analysis of the data and how to handle suspect or inconclusive data. Various methods of tying the data analysis to program needs should also be discussed. Additionally, program needs cannot always be tied to student achievement gaps or safety concerns. There should be a mechanism in the report that recognizes the basic need for enhanced student (as customer) experience across the College disciplines and service areas. For example, include an area in the report that focuses on specific enhancements that could lend itself to an overall positive increase in student satisfaction.

Division/Area Name: Health Sciences/ Respiratory Care Program

Year: 2013

Part 1 – Division or Area Overview

1.1 Briefly describe how the division or area contributes to the district mission.

College Mission	Respiratory Care Program Mission
“...serve the community by placing student success and student-centered learning as our number one priority through higher education standards and innovative programs and services...” (2012-2013 Catalog pg.8)	To serve the community by preparing students for a career in respiratory care.
<p>“We offer: Associate degree programs comprised of general education courses, proficiency requirements, designated courses in a specific major or area of emphasis. “</p> <p>“Certificate and degree programs comprised respiratory care and prepare for of “essential career technical instruction” employment in the field.in a variety of business, technical, and occupational courses designed to enhance students’ knowledge and skills leading to employment... certification and state or federal licensure.”(2012-2013 Catalog, p. 8).</p>	The Respiratory Care Program provides vocational education that leads to an associate in science degree. Students learn the knowledge, skills, and attitudes that will enable them to take the national licensure exams for respiratory care and prepare for employment in the field.

1.2 Place an “X” by each institutional Learning Outcome (ILO) supported by the division or area.

- ☒ Analyze diverse perspectives from a variety of disciplines and experiences that contribute to the development of self-awareness.
- ☒ Value and apply lifelong learning skills required for employment, basic skills, transfer education, and personal development.
- ☒ Demonstrate a breadth of knowledge and experience from the humanities, social and behavioral sciences, arts, natural sciences, and mathematics.
- ☒ Solve problems using oral and written communication, critical thinking and listening skills, planning and decision-making skills, information literacy, and variety of technologies.
- ☒ Demonstrate good citizenship and teamwork through respect, tolerance, cultural awareness, and the role of diversity in modern society.
- ☒ Identify career opportunities that contribute to the economic well-being of the community.

1.3 After completing Parts 2-7, prepare a one page summary of the division/area. Interpret the significance of the findings. Note successes in supporting district strategic goals and where improvements are needed.

1.4 Name of person leading this review:

Jeff Stephens RRT, RN, MSN, FNP-BC
Associate Professor/Program Chair, Respiratory Care

1.5 Names of all participants in this review

Jeff Stephens RRT, RN, MSN, FNP-BC

Associate Professor/Program Chair, Respiratory Care

Part 2 – Data Analysis and Use

2.1 Please review the five year headcount and FTES enrollment data provided on the web link. Comment on trends and how they affect your program.

FTES	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Admitted/Capacity	21/24	20/24	23/24	12/24	12/24
	88%	83%	96%	50%	50%

Comment: Program admission shows a steady increase in fall enrollment until 2011-2012 which declined following budgetary constraints due to state cuts. This mirrors the colleges' data on enrollment.

2.2 Report and analyze program/area data showing quantity of services provided over the past four years (e.g. number of students served, books sold, employees hired, acreage maintained).

Services Provided	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Students Served	21	20	23	12	12
Employees Hired				1 (FT)	1 (Adjunct)

Analysis: Program services have declined and reflective of enrollment due to state cuts. Employees hired replaced existing vacancies that occurred and required by accrediting body (Commission on Accreditation for Respiratory Care – CoARC) for student/instructor ratio.

2.3 Please review the five year data on sections offered, faculty ratios, and efficiency data provided on the web link. Comment on trends and how they affect your program.

In review of the five year data there were significant reductions in sections offered to students, while faculty ratios were maintained based on enrollment. Efficiency increased as evident by student retention and success. However, the decrease in sections offered has impacted the **respiratory care program** and other programs by creating delays in student achievement. Limitations of degree requirement offerings and student volume relative to the economy have left students unable to obtain courses. This outcome delays entry into programs based on pre-requisite courses.

2.4 Using the discipline student success data provided by the web link, please comment on and similarities or differences between race, gender, location, and modality groups in meeting the Institutional Standard of 68% for student success (students earning grades of A, B, C, Pass or Credit). Identify what actions are planned to address trends and achievement gaps in the current academic year.*

The Respiratory Care Program trends (2008-2013) show a course completion rate of 72%.

Success by Gender

Academic Year	Female	Male	Antelope Valley College
2008-2009	94%	100%	68.0%
2009-2010	98%	100%	68.0%
2010-2011	100%	94%	68.0%
2011-2012	100%	100%	68.0%
2012-2013	100%	90%	68.0%

Success by Ethnicity

Academic Year	Hispanic	Non-Hispanic	Antelope Valley College
2008-2009	100%	98%	68.0%
2009-2010	87%	90%	68.0%
2010-2011	100%	93%	68.0%
2011-2012	100%	97%	68.0%
2012-2013	100%	93%	68.0%

Success by Race

Academic Year	Am Indian/AK Native	Asian	Black or African American	Pacific Islander	Other / Unknown	Antelope Valley College
2008-2009	100%	100%	100%	N/A	100%	68.0%
2009-2010	100%	91%	90%	N/A	89%	68.0%
2010-2011	100%	95%	88%	N/A	93%	68.0%
2011-2012	100%	100%	96%	N/A	100%	68.0%
2012-2013	100%	75%	94%	N/A	100%	68.0%

Comment: The program exceeds the college's Institutional standard in all demographics.

2.5 Analyze and summarize trends in student progression through basic skills courses, if applicable.

Not applicable

2.6 List degrees and certificates currently offered in the discipline. Analyze how resource adjustments or other changes during the past four years have impacted degree and certificate completion rates.

The Respiratory Care Program offers an Associate's degree in Science. Antelope Valley College has conferred sixty-three (63) degrees from 2008-2013. Resource adjustment strategies over the past four years have impacted the programs student volume by cutting enrollment and degree conferment in half. Therefore, there has been a drop in resource supply to the surrounding community.

2.7 Using the data provided by the web link, please comment on transfer rates to four-year institutions, license exam results, and job/placement/post testing. If applicable, cite examples of using additional resources (e.g. human, facilities/physical, technology, financial, professional development) or making other changes during the past four years that have resulted in improvements in transfer rates to four-year institutions, license exam results, and job placement/post testing.

The Respiratory Care program graduates are required to sit for three examinations before achieving the credential as a Registered Respiratory Therapist. They can however, obtain a state license to practice after successfully passing the CRT examination.

National Board Respiratory Care School Report 8/20/1013

Graduation Year	Exam: CRT	Graduates Tested	Total Passing
2012		14	92.9%
2011		14	85.7%
2010		14	100.0%
2009		18	72.2%
Graduation Year		Graduates Tested	Total Passing

Exam: WRRT			
2012		13	84.6%
2011		12	83.3%
2010		9	100.0%
2009		12	91.7%
Graduation Year	Exam:	Graduates Tested	Total Passing
2012	CSE	11	63.6%
2011		11	81.8%
2010		8	87.5%
2009		12	83.3%

Comment: A few health care facilities will hire the graduates after completing the CRT examination and therefore the graduates are not mandated to seek registry status at this point. However, within the next 5 years the CRT exam will cease to exist.

Year	Positive Placement	Graduates
2012	46.7%	15
2011	71.4%	14
2010	100.0%	14
2009	66.7%	18

Discussion: The Respiratory Care Program at Antelope Valley College is accredited by the Commission on Accreditation for Respiratory Care (CoARC) and therefore adheres to and exceeds all benchmarks set forth in their standards. We currently have an 87.7% four year average pass rate on the CRT examination, **exceed** the CoARC benchmark of 80% and **exceed** the national pass rate for this exam 138.74%. On the written registry examination (WRRT) we meet national standards at 94.55%. Positive job placement has dropped significantly over the past few years relative to State and National economy.

- 2.8 **Career Technical Education (CTE) programs: Review the labor market data on the California Employment Development Department website for jobs related to your discipline. Comment on the occupational projections for employment in your discipline for the next two years. Comment on how the projections affect your planning.**
<http://www.labormarketinfo.edd.ca.gov/Content.asp?pageid=1011>

Geographic Area	Estimated Employment	Projected Employment (2010-2020)	Percent Change	Additional Openings Due to Net Replacements
California	14,200	17,900	26.1%	2,700

California Accredited Programs	Number Graduates (24 Students = Mean)	Projected Additional Annual Openings (2010-2020)	Percent Increase
36	864	1790	+2.07%

Comment: Based on the labor market data available there is projected 2.07% state wide job market growth 2010-2020. However, the economy has forced Hospitals, Clinics and Private Institutions in southern California to close, which leaves less employment opportunities. This will impact our students as they will have to travel distances in order to obtain employment. Therefore, projected planning includes marketing to potential students outside of southern California specifically central coastal areas where programs are non-existent.

Part 3 – Outcome Analysis and Use

- 3.1 Analyze changes in student learning outcome (SLO) and program learning outcome (PLO) assessment findings over the past five years. Cite examples of using data during that time as the basis for resource allocation (e.g. human, facilities/physical, technology, financial, professional development) or making other changes that resulted in or correlate with improved learning outcome findings over the past four years.*

Respiratory Care Program Learning Outcomes

PLO	Criterion Assessment	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
"Promote service excellence in clinical practice by pursuing lifelong professional development."	80% of graduates will pass national CRT credentialing examination(s) and obtain a California State license to practice. 51% of graduates will pass the national WRRT examination (percent to meet or exceed national standard 51.72%) 65% of graduates will pass the national CSE examination and obtain the RRT credential (percent to meet or exceed national standard 65.65%). PLO to be measured 6 months after graduating cohort.	Not Established	100% of 2010 cohort passed the CRT credentialing process	2010-2011 Graduates N=13 84.6% (11) passed the national credentialing examination and obtained a California State license to practice.	2011-2012 Graduates N=11 90.9% (10) passed the national credentialing examination and obtained a California State license to practice	Cohort 2012: N=14 (92.9%) passed the Certification Examination and obtained a California State license to practice. 10 of 12 graduates tested (83.3%) successfully passed the WRRT 7 out of 10 graduates tested (70%) successfully passed the Clinical Simulation Examination and were awarded the RRT credential.
"Synthesize learning from the sciences, mathematics,	40% attrition of the total number of students in the	Not Established	58% of 2010 cohort completed	2011 Graduates N=13 Shows	2012 Graduates N=12 out of 17	2013: 12 (cohort 2011) 3 were

humanities, arts, social sciences into professional practice.”	enrollment cohort. (Commission on Accreditation for Respiratory Care CoARC Benchmark)		the respiratory program successfully.	54% attrition of the total number of student enrolled in the cohort. (CoARC Standards)	students. Data shows 29% attrition of the total number of student enrolled in the cohort. (CoARC Standards - standard met based on CoARC benchmark)	dropped due to academic personal reasons (25% attrition); 2 students re-enrolled from previous cohorts; 11 students graduated . A decrease of 4% in attrition.
PLO	Summative Assessment	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
“Apply critical thinking and information technology as the foundations for clinical decision making and patient care.”	100% of students enrolled in clinical course RCP 204 will satisfactorily pass program cumulative competencies.	Not Established	14 out of 14 (100%) passed RCP204 final program cumulative competencies.	13 out of 13 students (100%) of the 2011 cohort satisfactorily passed cumulative competencies	17 out of 17 students (100%) satisfactorily passed program cumulative competencies	11 out of 11 students enrolled in RCP 204 satisfactorily passed cumulative competencies (100%).
“Collaborate with the patient, significant others and members of the health care team.”	100% of students enrolled in clinical course RCP 204 will satisfactorily pass program cumulative competencies	Not Established	14 out of 14 (100%) passed RCP204 final program cumulative competencies.	13 out of 13 students (100%) of the 2011 cohort satisfactorily passed cumulative competencies	17 out of 17 students (100%) satisfactorily passed program cumulative competencies	11 out of 11 students enrolled in RCP 204 satisfactorily passed cumulative competencies (100%).
Practice as an advanced respiratory care practitioner within the	Evidence of program success in preparing graduates to function as	Not Established	Not Established	Not Established	Cohort 2011 1. Identified 43% (3 year	Cohort 2013 7 out of 7 employer surveys were

legal, ethical, professional and regulatory standards of respiratory care practice.	competent respiratory therapists. 50% of the employers have returned surveys (3-year average). 80% of returned employer surveys rating overall satisfaction 3 or higher on a 5-point Likert scale. 70% positive placement (3-year average) Commission on Accreditation for Respiratory Care (CoARC) benchmarks. PLO to be measured 6 months after graduating cohort.				average) returned employer surveys. Identified negative relationship between graduate students and job availability due to market constraints. 2. 100% of surveys returned identified an overall satisfaction greater than 3 on a 5-point Likert scale. 3. Identified 43% (3-year average) positive placement based on returned surveys.	returned (100%) 7 out of 7 surveys (100%) rated cognitive, affective, and psychomotor skills 3 or higher on a 5-point Likert scale. 7 out of 13 graduates are employed from the class of 2012 (53%) which provides a 69.8% 3-year average for positive placement.
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Comment: SLO's were developed and implemented for each course in 2009. There are only 3 years of data available. All SLO's reflect both program learning objectives and the Commission on Accreditation (CoARC) for respiratory care benchmarks. Changes to staffing, physical facilities/technology, and resource allocation have been made to meet achievement targets. For example, recent CoARC requirements mandate a 6:1 ratio students/instructor and class outlines of record have been submitted to the academics policy and procedure committee. In addition, based on the student competencies, self-assessment examinations, and national board credentialing results (poor mechanical ventilation skills, critical-thinking skills, and quality assurance) monies have been acquired from Perkins grant funding to improve technology and advance professional development. Action plans reflect the need to meet the maintenance of classroom/lab durables and supplies through Proposition 20 funding. Improvement in learning outcomes are observed based on national exam results which showed an increase in total program pass rate from 85.7% to 92.9% and first-time pass rate of 50% to 78.6% (cohort 2011 to 2012).

- 3.2 Analyze changes in operational outcomes (OO) findings over the past five years. Cite examples of using data during that time as the basis for resource allocation (e.g. human, facilities/physical, technology, financial, professional development) or making other changes that resulted in or correlate with improved OO findings over the past four years.**

Not Applicable

Part 4 – Stakeholder Assessment

4.1 Assess how well the program serves the needs of the students, district, and community. Support statements with findings from students, employee, and or community surveys. Include feedback from other sources if relevant (e.g. advisory committees, employers, the community, universities, scores on licensure exams, job placement).

Note: Each survey is based on Likert scale 1-5; percentages reflect favorable (> 3) /unfavorable or not applicable response. Red values indicate returned responses.

Student Program Resource Survey <i>Survey Return</i>	2010 N=32 96%	2011 N=27 86%	2012 N=27 93%	2013 N=23 100%
Personnel Resources	93%	100%	96%	100%
Facilities	93%	97%	96%	100%
Laboratory Equipment	93%	97%	96%	100%
Learning Resources	96%	100%	96%	88%
Instructional Support Resources	89%	89%	84%	88%
Clinical Resources	89%	94%	92%	96%
Medical Director/Physician Interaction	66%	81%	85%	96%
Overall Rating	93%	92%	100%	96%

Program Personnel Resource Survey <i>Survey Return</i>	2010 N=8 80%	2011 N=5 83%	2012 N=7 83%	2013 N=5 87.5%
Personnel Resources	75%	80%	100%	100%
Facilities	100%	80%	100%	100%
Laboratory Equipment	100%	80%	100%	100%
Learning Resources	100%	100%	100%	100%
Program Support Personnel	100%	100%	100%	100%
Financial Resources	100%	100%	100%	100%
Clinical Resources	100%	100%	100%	100%
Physician Interaction	75%	100%	100%	100%

Graduate Survey <i>Survey Return</i>	2010 N=7 38%	2011 N=4 31%	2012 N=8 57%	2013 N=10 83%
Knowledge Base (Cognitive Domain)	100%	100%	100%	100%
Clinical Proficiency (Psychomotor Domain)	100%	100%	88%	100%
Behavioral Skills (Affective Domain)	100%	100%	88%	100%
Overall Program Rating	100%	100%	100%	90%

Employer Survey <i>Survey Return</i>	2010 N=7 54%	2011 N=8 61%	2012 N=3 21%	2013 N=7 54%
Knowledge Base (Cognitive Domain)	100%	100%	100%	100%
Clinical Proficiency (Psychomotor Domain)	100%	100%	100%	100%
Behavioral Skills (Affective Domain)	100%	100%	100%	100%
Overall Rating Graduate	100%	100%	100%	100%

Discussion: Based on generated data from four surveys students, personnel, graduates, and employers identify a positive program response. Therefore assumptions can be made that the Respiratory Care program serves the students, district, and community well. Improvements in areas such as the change in medical director have improved the students learning outcomes. Data limitations include below average return on surveys by graduates and employers. This may be reflective of at 46.7% employment rate among graduates and reflective of the over-all economy.

Part 5 – Goals and Objectives

5.1 Review the goal(s) identified in your most recent comprehensive self-study report and last year's annual report. Indicate which have been completed and eliminated.

Primary Goal: To prepare students as competent advance-practice therapists.

Objective(s):

- 1a. Upon completion of the program, the student will demonstrate the ability to comprehend, apply, and evaluate clinical information relevant to their role as an entry level and/or advance-practice therapist (***knowledge domain***).
- 1b. Upon completion of the program, the student will demonstrate the technical proficiency in all the skills necessary to fulfill the role as an entry-level and/or advanced-practice therapist (***psychomotor domain***).
- 1c. Upon completion of the program, the student will demonstrate professional behavior consistent with employer expectations for entry-level and/or advanced-practice therapist (***affective domain***).

Review: All goals remain intact and active in order to meet the colleges' mission to provide certificate and degree programs comprised of "essential career technical instruction" in a variety of business, technical, and occupational courses designed to enhance students' knowledge and skills leading to employment... certification and state or federal licensure. In addition, the goals support the mission of the Commission on Accreditation for Respiratory Care (CoARC) "to serve the public by ensuring high quality respiratory care education through accreditation services."

5.2 List discipline/area goals and objectives to improving outcome findings and/or the success of the various learner populations in completing courses, certificates, degrees, and transfer requirements. Discipline/area goals must be guided by district Strategic Goals and Plan summaries in the Educational Master Plan (EMP). They must be supported by an outcome action plan, data analysis, national or professional standards, and/or a requirement or guideline from an outside agency (e.g. legislation, Chancellor's Office, accrediting body, professional board). Consider curriculum, instruction, assessments, program services, operations, collaborations, scheduling, location, technology, etc.

Current (up to three years)

Goal 1: *Fulfill the need for Advanced Respiratory Care Practitioners in our community.*

Guided Strategic Goal(s): (3) The college will expand and diversify Career Technical education options for students.

Supporting action plan, data analysis or other documentation:

Outcome assessment thresholds are established by the Commission on Accreditation for Respiratory Care (CoARC) and are related to expectations for graduate success. The program must, at a minimum, meet the assessment thresholds established by CoARC for the following program outcomes, regardless of location and instructional methodology used: a) Graduate performance on the national credentialing examination for entry into practice; b) Programmatic retention/attrition; c) Graduate satisfaction with program; d) Employer satisfaction with program; and e) Job placement (*Standard 3.13*).

CoARC has established minimum performance criteria (thresholds) for each of the outcomes assessments. The program must meet the outcomes assessment thresholds, as documented in its Annual Report of Current Status (RCS). The RCS shows the program's outcomes results in relation to the thresholds. Programs not meeting the

established CoARC outcomes assessment thresholds must begin a dialogue with CoARC to develop an appropriate plan of action for program improvement that includes addressing the identified shortcomings (*Standard 3.14*).

Commission on Accreditation for Respiratory Care Thresholds

Program Outcome	Cut Score / Definition 7/1/2012	Threshold 7/1/2012
CRT Credentialing Success	NBRC passing score (set by NBRC) On the RCS this calculation excludes graduates who have previously earned the CRT credential prior to matriculation into the program (i.e., advanced placement). This calculation includes baccalaureate and graduate students earning the CRT credential in CoARC-accredited programs approved to grant special certificates of completion for CRT/RRT eligibility under CoARC policy 13.0.	80% of total number of graduates obtaining NBRC CRT credential (3-year average)
RRT Credentialing Success	N/A (programs are still be required to provide RRT outcomes data on annual reports, however, no accreditation actions will be taken based on RRT credentialing success).	N/A
Retention / Attrition	<p>Students formally enrolled in a respiratory care program that began fundamental (non-survey) respiratory care core coursework and have left for academic or non-academic reasons. Students who leave the program before the fifteenth calendar day from the beginning of the term with fundamental respiratory care core coursework and those students transferring to satellites are not included in program attrition.</p> <p><u>Academic</u> - Attrition due to failure to meet grades or other programmatic competencies (e.g. ethics, professionalism, behavioral) or another violation of an academic policy that results in a student's expulsion from the program.</p> <p><u>Non-Academic</u> - Attrition due to financial hardship, medical, family, deployment, changing course of study, relocation, or reasons other than those defined in Academic.</p> <p><u>Fundamental respiratory care coursework</u> is defined as: Professional coursework</p>	40% attrition of the total number of students in the enrollment cohort (3-year average)

	progressing toward completion of respiratory care program once formally admitted into the program.	
Positive (Job) Placement	<p>Defined as a graduate who within twelve (12) months after graduation is:</p> <p>a. Employed utilizing skills as defined by the scope of practice within the respiratory care profession. (i.e. full- or part-time, or per diem), or</p> <p>b. enrolled full- or part-time in another degree program, or</p> <p>c. serving in the military.</p>	70% positive placement (3-year average)
Graduate Survey – Overall Satisfaction*	A rating of 3 or higher on a 5-point Likert scale for overall satisfaction.	At least 80% of returned graduate surveys rating overall satisfaction 3 or higher on a 5-point Likert scale.
Graduate Survey – Participation	The total number of program graduates employed in respiratory care who return their graduate survey.	50% of the graduates have returned surveys (3-year average)
Employer Survey – Overall Satisfaction	A rating of 3 or higher on a 5-point Likert scale for overall satisfaction	At least 80% of returned employer surveys rating overall satisfaction 3 or higher on a 5-point Likert scale.
Employer Survey – Participation	The total number of employers of program graduates who return their employer survey.	50% of the employers have returned surveys (3-year average)

On-Time Graduation Rate	Beginning with the Annual Report that was due July 1, 2011 all programs were required to report their on-time graduation rate. On-Time Graduation Rate is defined as the Total Number of On-time Graduates divided by the Total Number of Graduates. This is calculated as the number of students who graduate with their enrollment cohort (i.e., within thirty (30) days of their expected graduation date) divided by the total number of students who graduated on-time and students who graduated after the expected graduation date. The enrollment date and the expected graduation date of each cohort are specified by the program.	Report only - no threshold established
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Objective(s):

- 1) Upon graduation, all students will assume positions as respiratory care practitioners in hospitals without additional technical training.
- 2) The number of vacant employment positions for respiratory care practitioners will remain stable or decrease in the hospitals in the Antelope Valley.

Outcome Findings:

AVC Program	2012	2011	2010	2009
Attrition	25.5%	33.3%	18.2%	50.0%
Positive Placement	46.7%	71.4%	100.0%	66.7%
CRT Success	80.0%	85.7%	100.0%	72.2%
RRT Success	46.7%	64.3%	42.9%	55.6%
Employer Satisfaction	100.0%	100.0%	100.0%	100.0%
Graduate Satisfaction	100.0%	87.5%	100.0%	100.0%
On-Time Graduation	75.0%	100.0%	76.5%	100.0%

Comment: Positive placement has dropped significantly primary related to local and California State economy. Health care institutions are “freezing” vacant positions in addition to eliminating additional staff. Hospital closures in the southern California area also impact employment. Limited positions available usually require re-location and advanced credentialing. Currently the State of California only requires the CRT credentialing examination to obtain licensure to practice. Therefore some health care agencies will employ graduates who have only attained this credential. This demotivates students to pursue the advanced RRT credential. However, the majority of institutions nationally are now requiring the RRT credential for entry level positions. Currently the Commission on Accreditation for Respiratory Care has mandated that programs will only offer RRT eligibility. It is a matter of time until the CRT credential will be eliminated from California. The Respiratory Care Program at AVC currently meets or exceeds all CoARC standards.

Credentialing Success:

Analysis of national board content area failures occurs annually. Specific changes to curriculum are made based on these content area deficiencies. The

program at AVC **exceeds** the national pass rate for examination on the CRT by 110.89% and has achieved 91,32% of the national average for the WRRT examination.

Implementation Objective(s):

- 1) Improve job placement by maximizing relationships with employment institutions.
- 2) Continue annual review of national testing content area deficiencies and implement additional curriculum changes to support success.

Goal 2: *Increase program faculty and hold to a high quality while maintaining accreditation standards for respiratory care.*

Guided Strategic Goal(s): (1g) Increase class offerings in high demand classes and disciplines; (7a) Increase support for classroom, counseling, student services offices, and instructional technology.

Supporting action plan, data analysis or other documentation:

1) The National Board for Respiratory Care

The primary purposes of the NBRC to provide high quality credentialing examinations for practitioners of respiratory therapy and pulmonary function technology; establish standards to credential practitioners to work under medical direction; issue certificates to and prepare a directory of credentialed individuals; advance medicine by promoting use of respiratory care in treating human ailments; support ethical and educational standards of respiratory care; and cooperate with accrediting agencies to support respiratory care education.

“Applicants shall have a minimum of an associate degree from a respiratory therapist education program **supported or accredited by the Commission on Accreditation for Respiratory Care (CoARC)**”

2) California Board of Respiratory Care

§ 3735. Successful completion of written examination prerequisite to license. Except as otherwise provided in this chapter, no applicant shall receive a license under this chapter without first successfully passing the national respiratory therapist examination conducted by those persons, and in the manner and under the rules and regulations, as the board may prescribe.

Implementation Objective(s):

- 1) Complete annual program reports to the commission and maintain all requirements.
- 2) Continue to provide adequate resources for the program.
- 3) Maintain funding to include program accreditation fees.

Analysis: To this point the Respiratory Care Program has satisfactorily completed all annual reports to CoARC and maintains all requirements.

Improvement Objectives:

- 1) Continue annual data analysis

Goal 3: *Continue monitoring student progress by utilizing data from standardized testing and national board examinations.*

Guided Strategic Goal(s): (1c) Increase the student success rate to exceed the standard set by the student success committee

Supporting action plan, data analysis or other documentation:

Review of content area deficiencies within the standardized exit examinations and national board testing revealed specific deficiencies: (Note: Area deficiencies are only represented as percent correct based on passing score 75%).

Content Areas	2012	2011	2010
I. Patient Data Evaluation and Recommendation			
A. Review of Patient Data			
B. Collect and Evaluate Data	57.7%	33.3%	
C. Recommend Procedures of Obtain Additional Data	65.7%	45.3% 41.7%.	65.7%
II. Equipment Manipulation, Infection Control, and Quality Control			
A. Manipulate Equipment by Order or Protocol	60.0%		58.8%
B. Ensure Infection Control	62.0%		
C. Perform Quality Control	56.5%	33.3%	
III. Initiation and Modification of Therapeutic Procedures			
A. Maintain Records and Communicate Information		53.4%	60.0%
B. Maintain Patent Airway Including Care of Artificial Airways	55.5%	35.7%	
C. Remove Bronchopulmonary Secretions	55.7%	41.7%	24.2%
D. Achieve Adequate Respiratory Support			
E. Evaluate and Monitor Patient's Objective and Subjective Responses	56.1%	43.7%	
F. Independently Modify Therapeutic Procedures Based on Patient Response			69.6%
G. Recommend Modifications in The Respiratory Care Plan Based on Responses	62.7%	48.1%	61.6%
H. Determine Appropriateness of Respiratory Care	63.8%	50.0%	57.7%
I. Initiate, Conduct, or Modify Respiratory Care	65.7%		52.5%
J. Act as Assistant to the Physician Performing Special Procedures			
K. Initiate and Conduct Pulmonary Rehabilitation		21.3%	
		27.6%	

Discussion: Area deficiencies vary from year to year yet there is a noted consistent improvement in those deficiencies across the cohorts.

Implementation Objective(s):

- 1) Continue to identify content-area deficiencies and provide adequate resource(s) for the program.
- 2) Continue annual data analysis

Goal 4:

Continue to provide medical direction for Respiratory Care Program as required by accreditation (CoARC) body.

Guided Strategic Goal(s): (1) The college as a community will provide students with an environment which supports learning and facilitates student success.

Supporting action plan, data analysis or other documentation:**CoARC Accreditation Standards**

2.03 The sponsoring institution must appoint, at a minimum, a full-time Program Director, a full-time Director of Clinical Education, and a Medical Director.

2.14 The program must appoint a Medical Director to provide and ensure direct physician interaction and involvement in student education in both the clinical and non-clinical settings; the Medical Director must be a Board certified, licensed physician, credentialed at one of its clinical affiliates, with recognized qualifications, by training and/or experience, in the management of respiratory disease and in respiratory care practices.

Recommendation from CoARC site visit 2009/ initial accreditation was to increase physician (medical director) involvement.

Advisory Committee 9/22/2011: It was agreed by consensus to recommend an increase to Dr. Ahmed's stipend to \$3000 per year.

Medical Director Activities (Per Semester)	Dr. R Shankar 2006-2009	Dr. S Ahmed 2009-(present)
Bi-Annual Advisory Meetings	3/6 = 50%	7/9 = 78%
Class Lectures / Seminars	4/6 = 67%	6/6 = 100%
Attend Graduation	0/3 = 0%	1/4 = 25%
Hospital Rounds Bi-monthly	0/4 = 0%	6/6 = 100%

Discussion: While the program has maintained medical direction from inception, the new medical director has increased his involvement significantly to comply and exceed CoARC requirements. Therefore it is my intent to request an increase in annual stipend from \$2,500.00 to \$3,000.00.

Implementation Objective(s):

- 1) AVC Board approval to increase medical director stipend from \$2,500.00 to \$3,000.00 annually.

Near Term (three to five years)

Goal 1: *Acquire additional "state of the art" mechanical ventilators and supplies to maintain standards of training in simulation.*

Guided Strategic Goal(s): (5b) Rely on discipline faculty to identify program equipment and facility needs.

Supporting action plan, data analysis or other documentation:**CoARC Accreditation Standards**

2.01 The sponsoring institution must ensure that fiscal, academic and physical resources are **sufficient** to achieve the program's goals and objectives as defined in Standard III, regardless of location and instructional methodology used.

Supporting Research

Definition: "Simulation is a technique—not a technology—to replace or amplify real experiences with guided experiences that evoke or replicate substantial aspects of the real world in a fully interactive manner. The diverse applications of simulation in healthcare can be categorized by 11 dimensions: aims and purposes of the simulation activity; unit of participation; experience level of participants; healthcare domain; professional discipline of participants; type of knowledge, skill, attitudes, or behaviors addressed; the simulated patient's age; technology applicable or required; site of simulation; extent of direct participation; and method of feedback used. Using simulation to improve safety will require full integration of its applications into the routine structures and practices of healthcare (Gaba, D, 2007).

Advisory Committee Support: 11/15/2012: Directed to proceed funding for ventilators and additional capital equipment supplies.

WEAVE Action Plans		Assessment Findings			
Active Action Plan(s) RCP 105	Supportive Evidence	2012	2011	2010	2009
Critical Thinking Skills (Summative)	1) The impact of simulation on the critical thinking skills in nursing students enrolled in an associate's degree program (Spencer, C. 2011). 2) The Dreyfus model of clinical problem-solving skills acquisition: a critical perspective (Pena, A. 2010) 3) Clinical Reasoning, Decision-making, and Action: Thinking Critically and Clinically (Benner, P, Hughes, R. & Stuphen, M., 2010)	<u>SLO 1</u> Active 12/12 100%	<u>SLO 1</u> Active 17/18 94%	<u>SLO 1</u> Active 14/15 93%	<u>SLO 1</u> Established 15/15 100%
Completion Clinical Competencies (Criterion-Based)	2) Utilizing simulation technology for competency skills assessment and a comparison of traditional methods of training methods (Tuttle, R., Cohen, M., Augstine, A., Novotny, D., Delgado, E, Dongilli, T., Lutz, J., & Devita, M., 2007).	<u>SLO 2</u> Active 12/12 100%	<u>SLO 2</u> Active 17/18 94%	<u>SLO 2</u> Active 14/15 93%	Established <u>SLO 2</u> Active 15/15 100%

Discussion: By providing students with accurate and "up to date" technology resources the program will enhance student experiences and learning outcomes. In addition graduates will be better prepared to fill positions in the job market.

Implementation Objective(s):

- 1) Continue to pursue Perkins funding and Proposition 20.

Long Term (five to ten years)

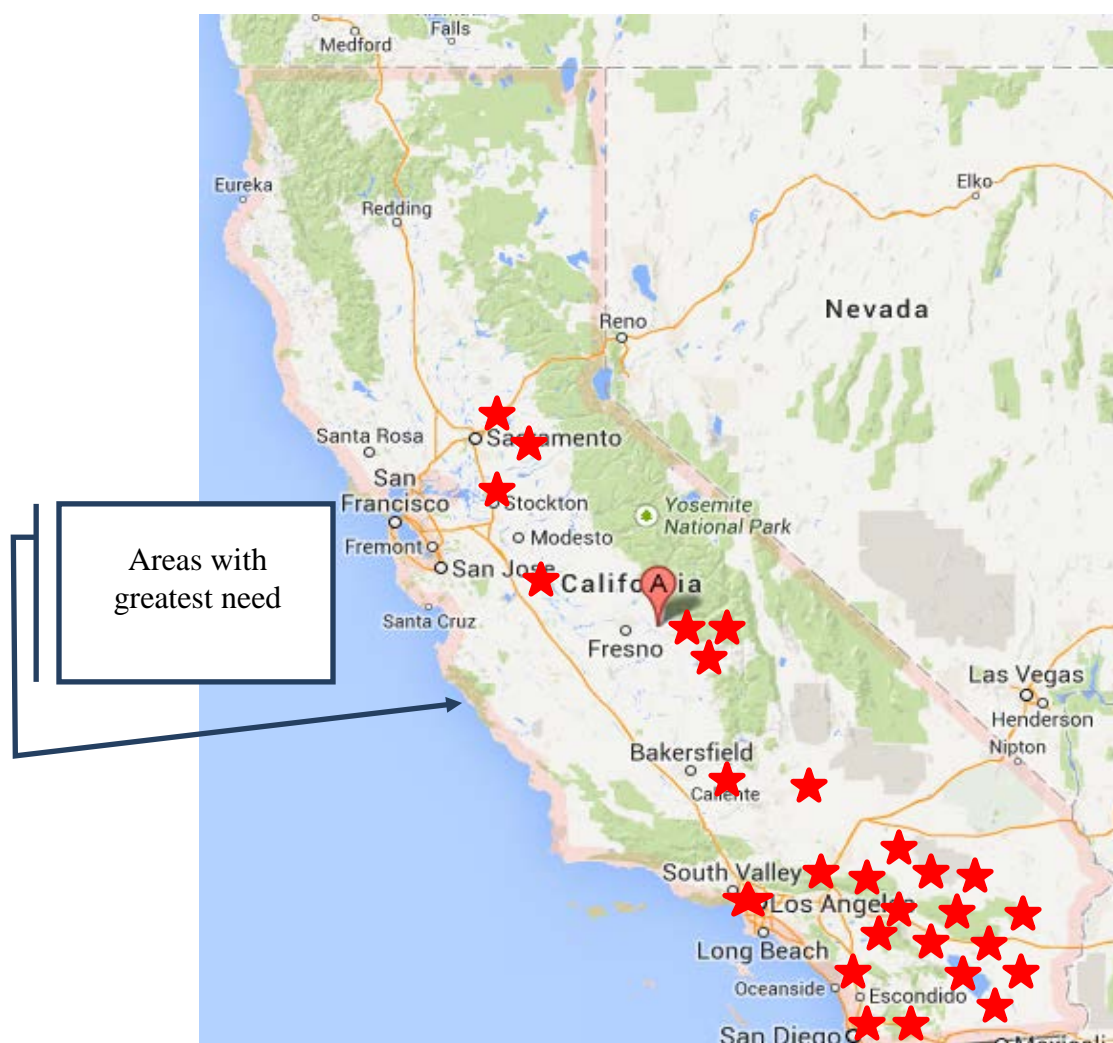
Goal 1: *Return program enrollment to 24 students.*

Guided Strategic Goal(s): (3) The College will expand and diversify Career Technical Education options for students.

Supporting action plan, data analysis or other documentation:

As indicated there are 36 accredited respiratory care programs in California. From the map below the majority are concentrated in the Southern California area where hospitals are saturated. Therefore to meet this strategic goal program expansion should occur through outreach as a consortium to central coastal communities in addition to our student population. This will require inter-collegial efforts, coastal area hospitals for clinical sites, and additional adjunct personnel to adhere to accreditation (CoARC) requirements. Current requirements include a clinical student/instructor ratio 6:1 and lab ratio 8:1.

California Respiratory Care Geographic Areas Served



Job Market Analysis

A market analysis revealed 18 positions available between Santa Maria and Fresno California. With limited programs available the demand exceeds the supply.

Implementation Objective(s):

- 1) Develop collaborative dialog between central coast community colleges to identify area needs.
- 2) Perform in-depth market analysis
- 3) Establish collaborative relationships between Antelope Valley College and area hospitals for student's clinical experiences and eventual employment.
- 4) Establish and maintain CoARC requirements for satellite program.
- 5) Acquire additional adjunct staffing to maintain CoARC student/instructor ratios.

- 5.3 **List discipline/area goals and objective directly related to advancing Strategic Goals. Discipline area/goals must be guided by Strategic Goals and Plan Summaries in the Educational Master Plan (EMP). They must be supported by data analysis or other documentation.**

Current (up to three years)

Goal 1: *Continue the Respiratory Care Program and current admission requirements.*

Guided Strategic Goal(s): (1) The college as a community will provide students with an environment which supports learning and facilitates student success. (1c) Increase the student success rate to exceed the standard of 68% set by the Student Success Committee. (3) the college will expand and diversify Career Technical Education options for students.(3b) Increase employer outreach for participation on advisory committees in occupational work-experience and in job placement.

Supporting action plan, data analysis or other documentation:

AVC Mission Statement

- "...serve the community by placing student success and student-centered learning as our number one priority through higher education standards and **innovative programs** and services...
- We offer: Associate degree programs comprised of general education courses, proficiency requirements, designated courses in a specific major or area of emphasis...
- Certificate and degree programs comprised respiratory care and prepare for of "essential career technical instruction" employment in the field.in a variety of business, technical, and occupational courses designed to enhance students' knowledge and skills leading to employment... certification and state or federal licensure."(2012-2013 Catalog, p. 8).

Respiratory Care Program Mission

- To serve the community by preparing students for a career in respiratory care.
- The Respiratory Care Program provides vocational education that lead to associate in science degree. Students learn the knowledge, skills, and attitudes that will enable them to take the national licensure exams for respiratory care and prepare for employment in the field.

Educational Master Plan

- "Academic Affairs will be focused on maintaining high efficiency in course scheduling and offerings to maximize the number of seats available in the three core areas: transfer, **career tech**, and basic skills."

Goal 2: *Maintain current budget to accommodate Respiratory Care Program expenditures.*

- **Guided Strategic Goal(s):** (5) The college will utilize campus resources efficiently and effectively. (5b) Rely on discipline faculty to identify program equipment and facility needs. (5c) Develop creative funding sources for equipment and facilities.
- **Supporting action plan, data analysis or other documentation:**
Action Plan: The program must, at least annually, assess the appropriateness and effectiveness of the resources described in Standard II. The results of resource assessment must be the basis for ongoing planning and appropriate change. Any deficiency identified in program resources requires development of an action plan, documentation of its implementation, and evaluation of its effectiveness as measured by subsequent ongoing resource assessment. **CoARC Standard:** 3.07

Part 6 – Resource Needs

Identify significant needs that should be addressed currently (up to three years), near term (three to five years), and long term (five to ten years). If there may be safety issues, enrollment consequences, or other important concerns if a resource is not provided please make this known.*

6.1 List needed human resources. List titles in priority order. Identify which discipline/area goal(s) guides this need.

Current (up to three years)

Near-Term (three to five years)

1. **Increase adjunct faculty as needed to maintain staffing ratio 6:1 in clinical area. Rationale/CoARC Standard:** 2.15 In addition to the key personnel, there must be sufficient faculty to provide effective instruction in the didactic, laboratory, and clinical setting. In clinical rotations, the student to faculty ratio cannot exceed 6:1. **(RCP Goal #1)**

Consequences: If current personnel are not maintained the program will lose accreditation status and NOT be allowed to admit cohorts.

Primary Goal: To prepare students as competent advance-practice therapists.

Objective(s):

Upon completion of the program, the student will demonstrate the ability to comprehend, apply, and evaluate clinical information relevant to their role as an entry level and/or advance-practice therapist (**knowledge domain**).
 Upon completion of the program, the student will demonstrate the technical proficiency in all the skills necessary to fulfill the role as an entry-level and/or advanced-practice therapist (**psychomotor domain**).
 Upon completion of the program, the student will demonstrate professional behavior consistent with employer expectations for entry-level and/or advanced-practice therapist (**affective domain**).

6.2 List needed technology resources in priority order. Identify which discipline/area goal(s) guides this need.

Current (up to three years)

1. **Maintain current durable medical equipment (DME) supply budget to meet knowledge, psychomotor, and affective domains. (RCP Goal # Rationale/CoARC Standard:** 3.07 The program must, at least annually, assess the appropriateness and effectiveness of the resources described in Standard II. The results of resource assessment must be the basis for ongoing planning and appropriate change. Any deficiency identified in program resources requires development of an action plan, documentation of its implementation, and evaluation of its effectiveness as measured by subsequent ongoing resource assessment. **(RCP Near Term Goal #2)**

Near-Term (three to five years)

1. **Purchase two (2) “state of the art” mechanical ventilators to be used in collaboration with registered nursing program.**
Rationale/Standards Statement(s): “All health care practitioners providing respiratory care services to patients, regardless of the care setting and patient demographics, shall successfully complete training and demonstrate initial competence prior to assuming those duties. This training and demonstration of competence shall be required of any health care provider regardless of credential, degree, or license.” - **AARC**
Position Statement: *Competency Requirements for the Provision of Respiratory Care Services*
 Inter-professional competencies are defined as the “integrated enactment of knowledge, skills, and values/attitudes that define working together across the professions, with other health care workers, and with patients, along with families and communities, as appropriate to improve

health outcomes in specific care contexts.” - *IEC Expert Panel, 2011, p.2 (RCP Near Term Goal #2)*

2. **Purchase one (1) neonatal mechanical ventilator.**
Rationale/Standards Statement(s): As above.

Consequences: “The complexities of respiratory care are such that the public is at risk of injury, and health care institutions are at risk of liability when respiratory care is provided by inadequately educated and unqualified health care providers rather than by practitioners appropriately educated in the specialty of Respiratory care. All health care practitioners providing respiratory care services to patients, regardless of the care setting and patient demographics, shall successfully complete training and demonstrate initial competence prior to assuming those duties. This training and demonstration of competence shall be required of any health care provider regardless of credential, degree, or license. Formal education is defined as a systematic educational activity in the affective, psychomotor and cognitive domains. It is intended to develop new proficiencies with an application in mind, and is presented with attention to needs, objectives, activities and a defined method of evaluation.” (American Association Respiratory Care, 2012). **(RCP Near Term Goal #2)**

Primary Goal: See Goal/Objective(s) 6.1.

- 6.3 **List facilities/physical resources (remodels, renovations, or new) needed to provide a safe and appropriate students learning and/or work environment. Identify which discipline/area goal(s) guides this need.**

Current (up to three years) – Long Term (five to ten years)

1. **Maintain current facilities in Health Science Building.**
Rationale/CoARC Standards: 2.01 The sponsoring institution must ensure that fiscal, academic and physical resources are sufficient to achieve the program’s goals and objectives as defined in Standard III, regardless of location and instructional methodology used.

Consequences: If current physical resources are not maintained the program will lose accreditation status and NOT be allowed to admit cohorts.

Primary Goal: See Goal/Objective(s) 6.1.

- 6.4 **List needed professional development resources in priority order. Identify which discipline/area goal(s) guides this need.**

Current (up to three years) – Long Term (five to ten years)

1. **Provide annual funding for faculty to attend American Association for Respiratory Care Annual (AARC) Summer Forum.**
Rationale/California State Licensure: §1399.350. Continuing Education Required. (a) Each respiratory care practitioner (RCP) is required to complete 15 hours of approved continuing education (CE) every 2 years. At least two-thirds of the required CE hours shall be directly related to clinical practice.
Rationale: advancing technology and changing job responsibilities require a technologist to update their knowledge and skills consistent with any new developments in respiratory care. Continuing education (CE) provides a mechanism for practitioners to fulfill their responsibility to maintain competence and prevent professional obsolescence.

Participation in CE demonstrates accountability to peers, physicians, health care facilities, and the public. The result is improved quality of healthcare for the patient. **(Educational Master Plan Goal #5d)**

2. Provide funding for faculty simulation training.

Rationale: Utilizing simulation technology for competency skills assessment and a comparison of traditional methods of training methods (Tuttle, R., Cohen, M., Augustine, A., Novotny, D., Delgado, E, Dongilli, T., Lutz, J., & Devita, M., 2007). "... the effective use of simulation may be seen as the product of three components: training resources, trained educators, and curricular institutionalization." **(Educational Master Plan Goal #5d)**

Consequences: Poor utilization of simulation mannequins.

Primary Goal: See Goal/Objective(s) 6.1.

6.5 List and other needed resources in priority order. Identify which discipline/area goal(s) guides this need.

None

Part 7 – Recommendations and Comments

7.1 List recommended changes to the Education Master Plan to:

- **Address external issues or mandates such as legislation, industry, and professional standards, etc.**

§ 3701. Legislative finding and declaration; Legislative intent

"The Legislature finds and declares that the practice of respiratory care in California affects the public health, safety, and welfare and is to be subject to regulation and control in the public interest. **The Legislature also recognizes the practice of respiratory care to be a dynamic and changing art and science, the practice of which is continually evolving to include newer ideas and more sophisticated techniques in patient care.** It is the intent of the Legislature in this chapter to provide clear legal authority for functions and procedures which have common acceptance and usage."

Professional/Industry Standards

The International Council for Respiratory Care (ICRC) is dedicated to advancing the safe, effective and ethical practice of respiratory care worldwide through the following initiatives:

- Promoting the art, science, clinical practice and educational foundation required for the attainment of high quality respiratory care outcomes in all nations;
- Developing and disseminating evidence-based standards of care according to the special needs and resources of individual nations;
- Facilitating interaction among and between the allied health professions, nursing, the medical specialties, hospitals and clinics, service companies and industry;
- Encouraging the creation and growth of related respiratory care organizations in individual nations, and
- Providing educational resources for patients, caregivers and the general public in respiratory health promotion, disease prevention and rehabilitation as appropriate in individual nations.

The American Association for Respiratory Care has conducted 3 conferences since March 2008, to picture the future practice of respiratory care. The focus of the first conference was to create a foundation and vision for the profession by examining expected changes in healthcare and how this may impact the respiratory therapist in the year 2015 and beyond. **Conference 1:** Topics explored were disease management, biomedical innovation, and human resource issues, as the United States adjusts to population increase, the aging of America, and decreasing the cost of healthcare while maintaining or improving quality. **Conference 2:** April 2009 focused on the competencies needed by graduate respiratory therapists and the workforce as the profession adjusts to these projected changes. **Conference 3;** held in July 2010, sought to determine how the respiratory therapy (RT) education system (both before and after degree) needs to change in order for the competencies required of the future RT workforce to be accomplished with minimal impact on current personnel.

American Association for Respiratory Care (AARC) Recommendations to Commission on Accreditation for Respiratory Care (CoARC): Respiratory Therapy Workforce for 2015 and Beyond

- The sponsoring institution must be a post-secondary academic institution accredited by a national or regional accrediting agency that is recognized by the U.S. Department of Education. Programs accredited prior to 2013 that do not currently offer a baccalaureate degree or graduate degree must transition to conferring a baccalaureate or graduate degree who matriculates into the program by 2020.
- Develop standards to assess competencies of RTs in the workforce relative to job assignment and assess knowledge, skills, and attributes relative to the tasks.
- The AARC in cooperation with CoARC consider development of consortia and cooperative models for associate degree programs that wish to align with bachelor degree granting institutions for award of the Bachelor's degree.
- That the AARC provide budgetary resources to assist associate degree programs with transition to baccalaureate level respiratory therapist education.

Recommendation 1: Expand the California Community Colleges primary mission to include vocational instruction through the baccalaureate level as the majority of vocational programs in health care will require this for job entry.

Note: In California there is only one private University (Loma Linda) that offers baccalaureate training in respiratory care.

- **Respond to outcome findings**

The respiratory care program at AVC currently meets or exceeds standards set forth by the accrediting body CoARC. The program supports the educational master plan and maintains standards as evidenced by PLO and SLO evaluation. Annual program review continues to identify trends that require alterations in course content, instruction and or technology. Evaluation of labor market data and California's State economy has required our program to think "outside the box" to address the important issue and program goal of positive-placement.

- **Reflect changes in technology, methodology, and/or disciplines.**

Changes in technology and in the discipline of respiratory care have advanced significantly over the past 5 years. Significant advances to various modalities of care in oxygen delivery, inflation therapy, medication delivery, and critical care medicine require more advanced training in critical-thinking as well as decision-making. Therefore, it

becomes more imperative for educators to align didactic training with problem-based learning and competency standards.

- **Address student achievement gaps and/or meet other student needs.**
Achievement gaps have been identified in content areas based on national exam success review and employment data (related to labor market). Specific domains of student learning (cognitive - patient data evaluation, equipment manipulation, and modification of therapeutic procedures) are consistently addressed in didactic training through re-engineering of course content and competency requirements. Additional cognitive gaps must be address by consistent program support with advanced technology. While the respiratory care program at Antelope Valley College has little impact on the State's economy and jobs we continue to network with the various local hospitals to encourage student employment. Perhaps additional outreach to underserved areas would improve student opportunities.

Recommendation 2: Currently the educational master plan does NOT address the requirements for accreditation status of specific career technical education programs.

- All programs in the health science division **require** accreditation before students are admitted and are allowed to complete credentialing and or licensure examinations that allow practice.

7.2 **What changes in the program review process would improve institutional effectiveness or make the results more helpful to the program?**

The current program review while labor intensive, is very thorough and address all aspects of the college's mission and institutional learning objectives. In reflection I would not make any changes to the current process.

Discipline: Vocational Nursing Program
Program year: 2013-14

Part 1 – Division or Area Overview

- 1.1 The Vocational Nursing Program (VNP) contributes to the district mission by offering a certificate of 'essential career technical instruction.'
- 1.2 Place an 'X' by each Institutional Learning Outcome (ILO) supported by the division or area.
 - ☒ Analyze diverse perspectives from a variety of disciplines and experiences that contribute to the development of self-awareness.
 - ☒ Value and apply lifelong learning skills required for employment, basic skills, transfer education, and personal development.
 - ☒ Demonstrate a breadth of knowledge and experiences from the humanities, social and behavioral science, arts, natural sciences, and mathematics.
 - ☒ Solve problems using oral and written communication, critical thinking and listening skills, planning and decision-making skills, information literacy, and a variety of technologies.
 - ☒ Demonstrate good citizenship and teamwork through respect, tolerance, cultural awareness, and the role of diversity in modern society.
 - ☒ Identify career opportunities that contribute to the economic well-being of the community.
- 1.3 The VNP offers the student a strong academic program that reflects the district mission. The data indicates that the program exceeds the Institutional Standard of 68% for student success based on race, gender, location, and modality. However, in recent years, the pass rate for the licensure exam for has fallen below both the state and national standards. An encouraging note is that the most recent pass rate (2013) was well above both standards, but consistency has not been established. Changes and resources need to be adjusted to maintain an acceptable consistent pass rate.

The projected labor market for licensed vocational nurses is somewhat bleak. Although utilized in numerous health care facilities, locally, they are no longer hired in large numbers in acute care hospitals. This trend may change in the future. However, many vocational nurses are seeking to become registered nurses. Therefore, the VNP needs to prepare the vocational student to be successful in a registered nursing program.

Recently, both of the acute care hospitals in the Antelope Valley revoked their contracts with the college, disallowing vocational nursing students to use these locations for clinical practice. This action required the VNP to be placed on hiatus due to lack of clinical sites. Fortunately, Antelope Valley Hospital has agreed to reinstate the contract. It is planned that the VNP will be taken off hiatus and a full class accepted in the fall of 2014.
- 1.4 Annette Jones/Candace Martin
- 1.5 NA

Part 2 – Data Analysis and Use

- 2.1 In the fall of 2010, the VNP underwent a significant change in class structure. Prior to the change, the VNP consisted of three semesters, with students entering the program in the fall and completing it in the summer. In 2010, the program continued to admit students in the fall, but went to two semesters, one winter intersession, and one summer session, which completed the program. Also, the number of students admitted to the program was reduced to 30. Prior to the change, the falls of 2007 and 2008 averaged 40 students, while after the change, classes in the falls of 2009 through 2012 averaged 27 students. As students progressed through the program, the headcount remained steady with occasional

dips. The summer 2010, however, showed a significant drop in headcount: from 21 students in the spring to 16 students in the summer. The headcounts reflect both returning VNP students as well as Associate Degree, Nursing program (ADN) students, who enter the program during the winter intersession or spring semester. The headcount reflects three types of students: 1) students whose goal is to obtain Licensed Vocational Nursing (LVN) licensure, 2) students who desire to enter the ADN program but are ineligible (students who complete the program can transfer into the ADN third semester) and, 3) students who have been unsuccessful in the ADN program but wish to reenter. The headcount does reflect how the VNP is utilized almost to its maximum enrollment most of the time.

The FTE's are extremely variable. Some students enter the program having completed all of the co-requisites, lowering the FTEs. Other students have not. The FTEs tend to be lowest in the summer session, which indicates students have completed the co-requisites. Students are encouraged to complete co-requisites prior to entering the program to increase student success. Therefore, high FTEs are not considered good indicators.

2.2 The data indicating the annual headcount for the VNP is misleading. Most of the students are continuing from entering the program the previous fall and, assumed, that their heads were counted more than once.

2.3 N/A

2.4 Race: The range for success for Hispanic, non-Hispanic, and unreported ethnicity are 79 to 95%, 83 to 92%, and 79 to 100%, respectively. The Institutional Standard (IS) of 68% for success is well met without any significant differences in race.

Location: All VNP classes are taught at the Lancaster location. The success rates range from 84 to 93%, exceeding the IS.

Mode: Lecture classes are typical didactic in nature. Lectures are recorded and made available to students via Podcasts. The success rates range from 84 to 93%, exceeding the IS.

Gender: The success rate range for females and males are 83 to 93%, and 75 to 100%, respectively, exceeding the IS. There is no significant difference in success among genders.

Fortunately, the IS has been surpassed significantly without any gaps related to race, gender, etc.

Therefore, no actions are required at this time.

2.5 N/A

2.6 Certificates for the VNP have been awarded to 133 students during the past five years, 26.6 certificates averaging per year. Over the last five years, an average of 32.3 students have been admitted to the VNP in the fall. That is an 82% success rate, well above the IS. No action is needed at this time.

2.7 The five-year licensure pass rate for graduates of the VNP ranges from 46 to 87%. The average is 65.8%. This average is well below the California state average of 78% and the national average of 83.7%. Fortunately, the most recent pass rate (2013) is 87%, above both the state and national averages.

However, the VNP has not established consistency in remaining above these averages, considering the previous four years were significantly low. Changes in examinations in the VNP have been implemented, but more changes are necessary to get the licensure pass rate back on track. Plans to raise the standard for entrance requirements are being considered. The VNP, however, is hampered by having to adhere to the requirements of the Board of Vocational Nursing and Psychiatric Technicians (BVNPT), which have not changed in recent years to reflect the progression of nursing practice. Currently, the BVNPT's only academic requirement to entering the VNP is a high school diploma.

Job placement is problematic for the newly licensed LVN. Anecdotally, most LVNs do not find full time employment, but seek to enter the ADN program. This is a trend that has occurred since the national recession and the decision by local hospitals not to hire LVNs. However, many health care institutions continue to utilize LVNs including clinics, nursing homes, physician's offices, and long-term home health care facilities.

2.8 According to the California Employment Development Department website, 3170 LVN jobs per year will become available through 2020. On the other hand, 9980 Registered Nursing (RN) jobs are projected to be available, annually. A major goal of the VNP curriculum is to prepare the graduate to enter and be successful in an ADN program.

Part 3 – Outcome Analysis and Use

3.1 The assessment results of the SLOs and PLOs for VN 109 and VN 110 are generally 100% in the clinical setting, for the past four years. This result is in large part due to the equipment students have access to learn nursing skills. A Perkins grant in the amount of **\$25,746.00** was acquired in 2012 to purchase 7 new mannequins which enhanced the training of the students and contributed to their success in the clinical setting in 2013.

The assessment results of the SLOs and PLOs for the weekly theory exams are generally 67% passing with a score of 70% or higher. The program is on hiatus at this time. It is recommended that if and when the program is reinstated, additional funds be allocated to include an NCLEX based pre and post course reviews in the curriculum to assess the students test taking ability and enhance their ability to take the course exams as well as the NCLEX exam.

3.2 The clinical site for VN 111 is Antelope Valley Hospital (AVH). This hospital is the only maternity and pediatric acute settings in the Antelope Valley. AVH continues to have a policy stating that the instructor/student ratio in the clinical setting cannot exceed 1:10. Because the Board of Vocational Nursing and Psychiatric Technicians (BVNPT) allows an instructor/student ratio of 1:15 in the clinical setting, class size usually exceeds ten students. Resource allocations had to be considered to accommodate a third clinical instructor to comply with AVH's policy. This decision was made during a Vocational Nursing (VN) faculty meeting with the attendance of Dr. Karen Cowell, Annette Jones, and Candace Martin. The effect of the outcomes for the SLOs and PLOs for 2010 and 2011 in the clinical setting was 100% success. The year 2012 resulted in one failure in the clinical setting. The year 2013 resulted in one failure in the clinical setting, which was health related concerning the student.

Due to a change in AVH policy, Vocational Students (VN) continue to be restricted from the labor and delivery area of the hospital. To maintain quality of instruction, a portion of resources from the Perkins grant previously discussed was allocated to purchase an OB mannequin. Assessment results of the implementation of the use of this mannequin are somewhat positive. 90% of the students completed the OB rotation successfully. However it is recommended that funds be allocated to include simulations for labor and delivery in the curriculum since this experience is absent from the clinical exposure of the students due to the AVH policy stated above.

Part 4 – Stake holder Assessment

4.1 Although the job market for the LVN in the Antelope Valley is poor, the VNP continues to be in demand evidenced by the number of applicants, and an average two year wait list. Anecdotally, this may be due to how quickly students complete the program (less than one year) and eligibility to enter the ADN in the third semester. Also, Antelope Valley Hospital has agreed to accept VN students into their facility beginning the fall 2014. This may indicate a changing trend that hospitals will begin to hire LVNs. The Nursing Advisory Committee supports the program.

Part 5 – Goals and Objectives

5.1 Significant achievements have been made regarding identified in the most recent comprehensive self-study report and last year's annual report.

1. Expand Clinical Skills Lab hours and hire a full time Clinical Skills Lab Coordinator.
This goal was achieved 100% with the appointing of a full time skills lab coordinator in fall 2013. This goal is ongoing.
2. Develop and incorporate clinical practice modules specific to the Vocational Nursing Program to be made available in the skills lab for clinical skills remediation.

Because a full time skills lab coordinator was not available, the achievement of this goal has been delayed. However, with the addition of a full time skills lab coordinator, this goal will be readdressed.

3. Incorporate an additional 24 hours into each Vocational Nursing Program to be made available in the skills lab for clinical skills remediation.

An attempt was made to include additional hours in the Vocational Nursing Program during its curriculum revision for the 12-month program. However, it was disallowed by the administrators of the college. However, it continues to be a goal for the future.

4. Develop a 12-month Vocational Nursing Program.
This goal is ongoing.

5. Conduct a validation study to determine if prerequisites in reading, writing, and math would assist the students to be more successful in VN 101 (now VN 110).
A validation study was completed and determined that prerequisites in the stated areas would not contribute to student success. This goal has been eliminated.

6. Hire a third full-time vocational nursing instructor.
With the budget cuts and the reduction of admission of vocational students to 30 students a year, a third full-time vocational nursing instructor is not required. However, when the admission of students returns to 45 or more, a third full-time instructor would remain a goal.

7. Develop resources for professional development of vocational nursing faculty.
This goal is ongoing.

8. Develop a plan to ensure a full class in VN 101.
Attempts to achieve this goal has been made but remains unmet.

9. To assess SLOs and PLOs each semester.
The SLOs and PLOs have been reviewed each semester. This goal is ongoing.

10. Improve NCLEX pass rates to be consistently over 90%.
This goal has not been achieved.

11. Hire a part time technician to maintain computer equipment in the computer lab.
This goal has been achieved since a full time technician is assigned to the Health Sciences building. This goal is ongoing.

12. Integrate simulation into the current curriculum. Recently, simulation manikins have been purchased, but have not been utilized by VNP students. With the addition of a full time skills lab coordinator will make this goal a possibility.

13. Validate prerequisites for courses. To increase the pass rate of the licensure exam, implementation of prerequisites are being explored.

5.2 Current (Up to three years)

Goal #1: Increase student success in the program on the licensure examination.

Guided by District Strategic Goal #1a

Although the licensure pass rate for 2013 has been above both the state and national averages, pass rates consistently above these averages needs to be obtained.

Objectives: Have the licensure exam pass rate consistently above both the state and national averages.

Goal #2: Develop a plan to ensure a full class in VN 101.

Guided by District Strategic Goal #1g

Objective: Admit more than 30 students to the program each year with the knowledge that not all students may be placed in a clinical setting (if some students do not drop).

Goal #3: Integrate simulation into the current curriculum.

Guided by District Strategic Goal 5b

Objective: Develop scenarios appropriate for VNP students and imbed into curriculum as assignments.

Goal #4: Maintain the student success rate to exceed the standard of 68% set by the Student Success Committee.

Guided by District Strategic Goal 1c.

This goal has been met but will continue to be assessed each year.

Goal #5: Validate prerequisites for courses.

Guided by District Goal 1f.

To increase the licensure pass rate, prerequisites are being explored and possibly implemented soon.

Action: To assess the licensure pass rate of other community colleges that have established prerequisites and perform a validation study.

Goal #6: Ensure an adequate adjunct instructor pool so the program can continue to provide high quality instruction.

Guided by District Goal 1c & 1e.

Action: Recruit additional RNs who can be in the pool, ready to teach.

Part 6 – Resource Needs

6.1 List needed human resources. List titles in priority order. Identify which discipline/area goal(s) guides this need.

1. Adjunct instructors for VN 111 and VN 113

AVH continues to have a policy stating that the instructor/student ratio in the clinical setting for OB and Pediatrics cannot exceed 1:10. Because the Board of Vocational Nursing and Psychiatric Technicians (BVNPT) allows an instructor/student ratio of 1:15 in the clinical setting, class size usually exceeds ten students. Resource allocations had to be considered to accommodate a third clinical instructor to comply with this policy for VN 111. **(VN Goal #6)**

2. Full time Skills Lab/simulation Lab coordinator for VN 109, 110, 111, 112, 113

It is recommended that funds be allocated to include simulations for labor and delivery in the VN program curriculum since this experience is absent from the clinical exposure of the students due to the AVH policy stated earlier. **(VN Goal #3)**

3. Computer Technology Support

A full time technician is assigned to the Health Sciences building. The continuation of this resource is imperative to the success of the program due to the use of many forms of computer technology through the Vocational Nursing Program. **(VN Goals #1 & 3)**

6.2 List needed technology resources in priority order. Identify which discipline/area goal(s) guides this need.

1. Computers with internet access in skills lab and lecture rooms for use instruction, demonstration, and practice for all rotations. **(VN Goals #1 & 3)**

2. TV, Monitors with VCR & DVD capability for all rotations. **(VN Goal #1)**

3. Student access to computers for online course review exams (HESI). **(VN Goal #1)**

6.3 List facilities/physical resources (remodels, renovations, or new) needed to provide a safe and appropriate student learning and/or work environment. List needs in priority order. Identify which discipline/area goal(s) guides this need.

1. Interior locking mechanisms for rooms in the HS building. **(related to safety for the entire college community)**

6.4 List needed professional development resources in priority order. Identify which discipline/area goal(s) guides this need.

1. Simulation Training **(VN Goals #1 & 3)**

6.5 List any other needed resources in priority order. Identify which discipline/area goal(s) guides this need.

1. It is recommended that if and when the Vocational Nursing Program is reinstated, additional funds be allocated to include an NCLEX based pre and post course review in the curriculum to assess the students test taking ability and enhance their ability to succeed when taking the course exams as well as the NCLEX exam. **(VN Goal #1)**

Part 7 – Recommendations and Comments

7.1 It is recommended that the Educational Master Plan reflect currency in technology, since this is an ever changing discipline. The new Health Sciences building is technologically sound, but without additions and updates, it will quickly become outdated.