Peralta Community College District

Chemistry Annual Program Update

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Introduction and Directions

The Peralta Community College District has an institutional effective process which consists of the following components: a District-wide Strategic Plan which is updated every six years; Comprehensive Program Reviews which are completed every three years; and Annual Program Updates (APUs) which are completed in non-program review years. While there are individualized Program Review Handbooks for Instructional units, Counseling, CTE, Library Services, Student Services, Administrative units, and District Service Centers, there is one Annual Program Update template for use by everyone at the colleges which is completed in the Fall semester of non-program review years.

The Annual Program Update is intended to primarily focus upon planning and institutional effectiveness by requesting that everyone report upon the progress they are making in attaining the goals (outcomes) and program improvement objectives described in the most recent program review document. The Annual Program Update is therefore a document which reflects continuous quality improvement. Additionally, the Annual Program Update provides a vehicle in which to identify and request additional resources that support reaching the stated goals (outcomes) and program improvement objectives in the unit's program review.

Throughout this document, the term "program" is used to refer to all of these terms: discipline, department, program, administrative unit, or unit.

The following items are required in order to complete the Annual Program Update document at the colleges:

- The most recently completed comprehensive Program Review document.
- Any comments or feedback provided during the program review validation process.
- College Goals
- Institution Set Standards (Institutional Standards that are reported annually to ACCJC)
- College Institutional Effectiveness Indicators (reported to the State Chancellor's Office annually)
- College SSSP plan
- College Equity Plan
- College Basic Skills Plan
- PCCD Strategic Goals and Annual Institutional Objectives
- Data profiles which include but are not limited to disaggregated demographics (age, gender, ethnicity, special populations), enrollment, productivity, student success metrics (retention, completion, etc.), and comparisons of Distance Education versus face-to-face classes.

I. Program Information

Program Name: Chemistry

Date: 10-10-2016

Program Type: Instructional **Student Services** **Administrative Unit**

(circle the answer)

College or District Mission Statement:

The Mission of College of Alameda is to serve the educational needs of its diverse community by providing comprehensive and flexible programs and resources that empower students to achieve their goals

Program Mission:

COA chemistry offers general chemistry (Chem 1A/1B) for science majors, introductory general chemistry (Chem 30A/30B) for allied-health career track students and beginning chemistry (Chem 50) for underprepared students needing basic skills. COA chemistry is a small program with one full time and six part time instructors. One chemistry laboratory (with four chemical hoods) exists which can reasonably accommodate 25 students and is currently used for all chemistry courses offered at COA. The only Peralta College to have one chemistry lab, COA is still waiting for the previously abandoned main campus chemistry lab to be upgraded to useful status, and thus avail ourselves of two labs. The COA chemistry program had been neglected for many years prior to Fall 2005 resulting in a substandard classroom/laboratory environment, serious safety issues in the lab, and a tendency to attract unprepared students looking for an easy grade. Efforts to address such issues are ongoing, and while still encountering "roadblocks", are paying off. Demand for chemistry courses is high and growing.

Date of Last Comprehensive Program Review: 10/22/2015

Date of Comprehensive Program Review Validation: 11/19/2015

II. Reporting Progress on Attainment of Program Goals or Administrative Unit Outcomes

Program Goal or Administrative Unit Outcome (AUO) (As reported in the most recent program review; cut and paste the goal or AUO from the program review document	**Which institutional goals will be advanced upon completion?** (circle all that apply)	**Progress on goal or AUO attainment** (choose one)	**Explanation and Comments** (If a goal or AUO is revised, please explain and describe the revision. Describe the impediments or detail what can be improved.)
Assessment **COA Chemistry SLOs assessed.**	1. PCCD Strategic Goals (list the specific goal here _____). 2. College Goals: (list the specific goal here _____).	**Completed: __10-2016_____** (date) Revised: _____ (date) Ongoing: _____ (date)	**Thanks to Eileen Clifford!**
Curriculum (if applicable)	1. PCCD Strategic Goals (list the specific goal here _____). 2. College Goals: (list the specific goal here _____).	Completed: _____ (date) Revised: _____ (date) Ongoing: _____ (date)	

Instruction (if applicable) **Hire two FT chemistry faculty**	1. PCCD Strategic Goals (list the specific goal here _____). 2. College Goals: (list the specific goal here _____).	Completed: _____ (date) Revised: _____ (date) Ongoing: **10-2016** (date)	**On hold since such hiring has not yet been authorized by the Peralta District.**
Student Success and Student Equity **Remedy lack of adequate lab space by refurbishing the previously abandoned D-109 main campus chemistry lab (since apparently no new science building is in the works due to disappearance of original bond money originally allocated for this).** **Hire FT chemistry lab tech capable of preparing and carrying out chem demos, creating and maintaining an online accessible inventory, and most importantly competent in the purchase, handling, storage and disposal of hazardous chemicals.**	1. PCCD Strategic Goals (list the specific goal here _____). 2. College Goals: (list the specific goal here _____).	Completed: _____ (date) Revised: _____ (date) Ongoing: **10-2016** (date)	**There has been no progress with D-109 chemistry lab since hoods were installed. Flammable cabinets are still wrongly vented (in violation of standard safety code). Need stock room lab benches, shelving, DI water system, compressed air, cabinets, plumbing renovation (especially faucets), etc.** **2nd item has been blocked for at least 10 years and is still being blocked by the SEIU rep at COA. The current FT lab tech's incompetence in handling/storage of hazardous chemicals constitutes a danger to students and a legal liability issue for COA and Peralta.**
Professional Development, Institutional and Professional Engagement, and Partnerships **Stanford research collaboration in geochemistry/geophysics: Took four chemistry students to southern Colorado with Professor Norm Sleep in June 2016 (6 days).**	1. PCCD Strategic Goals (list the specific goal here _____). 2. College Goals: (list the specific goal here _____).	Completed: _____ (date) Revised: _____ (date) Ongoing: _____ (date)	**This is an annual event involving COA students which is yet to be funded by Peralta. It is currently supported by the ASCOA plus Stanford and COA faculty.**
Other Program Improvement	1. PCCD Strategic Goals (list the	Completed: _____	

Objectives or Administrative Unit Outcomes	specific goal here _____). 2. College Goals: (list the specific goal here _____). _____.	(date) Revised: _____ (date) Ongoing: _____ (date)	
Other Program Improvement Objectives or Administrative Unit Outcomes	1. PCCD Strategic Goals (list the specific goal here _____). 2. College Goals: (list the specific goal here _____).	Completed: _____ (date) Revised: _____ (date) Ongoing: _____ (date)	

III. Data Trend Analysis

Please review and reflect upon the data for your program. Then describe any significant changes in the following items and discuss what the changes mean to your program. Focus upon the most recent year and/or the years since your last comprehensive program review.

A. Student Demographics (age, gender, ethnicity, special populations). **Comments about changes:**

B. Enrollment (sections, course enrollment, productivity, # of student contacts, etc). **Comments about changes:**

- Overall enrollment trends in the past three years: **Upon adding sections, chemistry classes typically fill up, strongly suggesting enrollment capacity is facilities limited: Only one laboratory facility (with 25 student capacity) is available for teaching all COA chemistry labs.**

CAMPUS	Alame								
SUBJECT	CHEM								
CATALOG_NBR	(All)								
TIME_OF_DAY	(All)								
CENSUS_TOTAL	**Term**								
Course	**2012 Summer**	**2012 Fall**	**2013 Spring**	**2013 Summer**	**2013 Fall**	**2014 Spring**	**2014 Summer**	**2014 Fall**	**2015 Spring**
CHEM 1A - GENERAL CHEMISTRY	12	62	64	27	61	97	31	90	97
CHEM 1B - GENERAL CHEMISTRY		22	33		19	25		26	33
CHEM 30A - INTRO GENERAL CHEM		37	38		29	40		60	52
CHEM 30B - INTRO ORGAN/BIOCHEM		24			27			20	22
CHEM 50 - BEGINNING CHEMISTRY			34		56	24		21	22
Grand Total	**12**	**145**	**169**	**27**	**192**	**186**	**31**	**217**	**226**

- An explanation of student demand (or lack thereof) for specific courses. **First semester chemistry courses (Chem 1A and Chem 30A) are in high demand since these are prerequisite for subsequent courses (Chem 1B and Chem 30B) and various biology courses (including Bio 1A). Chem 50 is a late start foundational preparatory class to accommodate students who sign up but are underprepared for Chem 1A.**

- Productivity for the discipline, department, or program compared to the college productivity rate. **Chemistry productivity is consistently near the college productivity of 17.5.**

CAMPUS	Alamed								
SUBJECT	CHEM								
	Term								
	2012 SUMMER	2012 FALL	2013 SPRING	2013 SUMMER	2013 FALL	2014 SPRING	2014 SUMMER	2014 FALL	2015 SPRING
Productivity	6.48	15.63	18.13	15.73	15.99	19.30	16.75	17.91	18.02

College productivity rate ___17.5_____

- Salient factors, if known, affecting the enrollment and productivity trends you mention above. **Chemistry enrollment is limited by lack of adequate lab space (see above).**

- Are courses scheduled in a manner that meets student needs and demands? How do you know?

Apparently courses are scheduled satisfactorily since enrollments are consistently high.

- Recommendations and priorities.

1) **Double existing laboratory space by refurbishing D-109/105 chemistry lab/stockroom areas to accommodate additional classes and especially Chem 1B. Stock D-119 demo prep room with supplies and replumb D-119 lecturn for chemistry demos.**
2) **Renew part-time lab tech who is currently the only staff member competent to prepare Chem 1B labs and will be instrumental in helping set up the D-109/105 main campus chemistry area. Hire qualified FT lab tech for routine preparation/implementation of chemistry demos, for creation and maintenance of on online accessible inventory, and who is competent in the purchase, storage, distribution and disposal of hazardous chemicals.**
3) **Provide funding for Chem 1B lab manual rewrite.**

C. Student Success (retention and completion rates, # of student contacts, etc.). **Comments about changes:**
See below under "Equity".

D. Student Success in **Distance Education/Hybrid classes versus face-to-face classes** (if applicable**). Comments about changes:**
N/A since chemistry doesn't offer distance education courses.

E. Other program specific data or unplanned events that reflect significant change in the program.

IV. Equity

- Please review the student success data for your program and comment upon it. Do performance gaps exist in the student success or achievement rates for disproportionately impacted students, including African-American, Hispanic/Latino, Filipinos/Pacific Islanders, foster youth, veterans, students with disabilities or other groups not listed here? If differences exist, please detail the differences and describe the activities your program is making to address the differences? How will your program evaluate the effectiveness of these activities?

First semester chemistry courses Chem 1A and Chem 30A have success percentages in the 50% vicinity because underprepared students tend to sign up without realizing the work load and/or prerequisite math knowledge. Second semester courses Chem 1B and Chem 30B have higher success percentages, 65% to 80% because the smaller number of students who enter these courses have already passed the first semester prerequisite courses Chem 1A and Chem 30A. Summer Chem 1A students tend to be stronger than regular semester students because a significant number are from four year colleges completing science requirements at COA while at home over the summer. Four year college students tend to complete homework, study, etc. and know what it takes to get a good grade. Some students, already familiar with the material, take the six-week summer Chem 1A as an intense chemistry review.

CAMPUS	Alameda
SUBJECT	CHEM
CATALOG_NBR	(All)

Success	Term								
Course	2012 Summer	2012 Fall	2013 Spring	2013 Summer	2013 Fall	2014 Spring	2014 Summer	2014 Fall	2015 Spring
CHEM 1A - GENERAL CHEMISTRY	72.73%	49.15%	43.55%	74.07%	40.00%	55.67%	83.33%	55.06%	46.39%
CHEM 1B - GENERAL CHEMISTRY	NA	54.55%	60.61%	NA	66.67%	44.00%	NA	38.46%	66.67%
CHEM 30A - INTRO GENERAL CHEM	NA	45.71%	48.65%	NA	65.52%	52.50%	NA	65.00%	51.92%
CHEM 30B - INTRO ORGAN/BIOCHEM	NA	83.33%	NA	NA	59.26%	NA	NA	65.00%	77.27%
CHEM 50 - BEGINNING CHEMISTRY	NA	NA	55.88%	NA	64.15%	75.00%	NA	61.90%	50.00%
Grand Total	**72.73%**	**55.00%**	**50.60%**	**74.07%**	**56.15%**	**55.91%**	**83.33%**	**57.41%**	**53.98%**

- Are there differences in the course completion rates when disaggregated by age, gender, ethnicity or special population (current or former foster youth, students with disabilities, low income students, Veterans)? If so, please describe. **Yes, in Chem 1A success percentages for hispanics, filipinos and blacks tend to be lower, about half (~30% success), of success percentages for whites and asians (~60% success). This may reflect national trends that programs like MESA are attempting to remedy. Chem 1B percentages are less meaningful due to statistics of small numbers: the number of hispanics, filipinos, and blacks enrolling in Chem 1B is small. No pattern is obvious (to me) in the age success data.**

CAMPUS	Alameda
SUBJECT	CHEM
CATALOG_NBR	(All)
TERM	2015 Spring

Success	Term									
Course	American Indian/Alaskan Native	Asian	Black/African America	Filipino	Hispanic	Other Non white	Pacific Islander	White Non Hispanic	Multiple	Unknown/ Non Responden
CHEM 1A - GENERAL CHEMISTRY	NA	58.14%	27.27%	16.67%	30.77%	NA	NA	60.00%	33.33%	NA
CHEM 1B - GENERAL CHEMISTRY	NA	91.67%	0.00%	100.00%	100.00%	100.00%	NA	57.14%	40.00%	50.00%
CHEM 30A - INTRO GENERAL CHEM	0.00%	62.50%	25.00%	100.00%	42.86%	NA	0.00%	71.43%	50.00%	50.00%
CHEM 30B - INTRO ORGAN/BIOCHEM	100.00%	100.00%	100.00%	50.00%	NA	NA	NA	66.67%	50.00%	100.00%
CHEM 50 - BEGINNING CHEMISTRY	NA	66.67%	NA	NA	40.00%	NA	NA	42.86%	0.00%	NA
Grand Total	**50.00%**	**67.06%**	**32.00%**	**46.15%**	**40.74%**	**100.00%**	**0.00%**	**59.52%**	**40.00%**	**60.00%**

CAMPUS	Alameda		
SUBJECT	CHEM		
CATALOG_NBR	(All)		
TERM	2015 Spring		
Success	**Term**		
Course	**Female**	**Male**	**Unknown**
CHEM 1A - GENERAL CHEMISTRY	52.63%	41.38%	100.00%
CHEM 1B - GENERAL CHEMISTRY	70.00%	65.22%	NA
CHEM 30A - INTRO GENERAL CHEM	54.84%	47.62%	NA
CHEM 30B - INTRO ORGAN/BIOCHEM	88.89%	25.00%	NA
CHEM 50 - BEGINNING CHEMISTRY	50.00%	50.00%	NA
Grand Total	**60.36%**	**47.37%**	**100.00%**

CAMPUS	Alameda					
SUBJECT	CHEM					
CATALOG_NBR	(All)					
TERM	2015 Spring					
Success	**Term**					
Course	**16-18**	**19-24**	**25-29**	**30-34**	**35-54**	**55-64**
CHEM 1A - GENERAL CHEMISTRY	63.64%	37.70%	66.67%	57.14%	33.33%	NA
CHEM 1B - GENERAL CHEMISTRY	80.00%	65.00%	80.00%	50.00%	0.00%	NA
CHEM 30A - INTRO GENERAL CHEM	75.00%	39.39%	50.00%	75.00%	85.71%	NA
CHEM 30B - INTRO ORGAN/BIOCHEM	100.00%	72.73%	66.67%	100.00%	100.00%	NA
CHEM 50 - BEGINNING CHEMISTRY	0.00%	38.46%	60.00%	100.00%	100.00%	100.00%
Grand Total	**68.18%**	**44.93%**	**65.71%**	**66.67%**	**73.33%**	**100.00%**

ETC.

Discussion: **COA can better serve its diverse population of students by 1) provide tutoring services early in the semester; 2) provide competently prepared laboratory experiments for which reagents are reliably labelled and concentrations are accurately known; 3) Provide adequate, comfortable, and safe environments for learning by doubling the laboratory space (D-109/105 main campus upgrade) and fixing chronic classroom issues (main campus D-119 lecture hall has broken seats and is much too warm for comfort even on cold days). Fixing the basics will likely improve success percentages across all categories. Students are not well served by substandard facilities, substandard laboratory staff support and lack of available tutoring for the first half of each semester.**

- Describe course completion rates in the department **for Distance Education** courses (100% online) for the past three years. Please list each course separately. How do the department's Distance Education course completion rates compare to the college course completion standard?

COA Chemistry does not offer distance education courses.

- Please review the SSSP plan, Equity plan, and Basic Skills plans at your college. How does your program address or participate in the information and activities presented in these plans? Are there resources available in these plans that can be utilized by your program or the students accessing your program?

  Student success in chemistry, and at COA in general, can be improved by effective sorting of students into appropriate classes. Chemistry classes usually require efficient study habits, prerequisite math knowledge, and sufficient motivation plus curiosity to learn about nature. Effective assessment and sorting by Student Services would reduce the current load currently undertaken by responsible chemistry faculty to do this sorting themselves during the first two weeks of class (usually with quizzes on math prerequisite and basic chemistry knowledge).

  Classes in effective study skills/habits would be very beneficial.

V. Curriculum and Assessment Status

- What curricular, pedagogical or other changes has your department made since the most recent program review?

Chemistry curriculum has not changed since the Fall 2015 program review. Before that program review, a late start Chem 50 was implemented to catch and help students not prepared to succeed in Chem 1A. New hoods were finally installed in the main campus D-109 chemistry lab, but no further progress has been made on required infrastructural improvements since the Fall 2015 program review. As in previous semesters, several successful chemistry students were hired as tutors for MESA and general tutoring.

- Were these changes based on assessment of student learning outcomes at the course or program level? Please identify the assessment. If s. If assessment was not used, describe the basis for the change. For example, Title 5 requirements, certifications requirements, etc.

  Prior to the Fall 2015 program review, late start Chem 50 was implemented to address the high general chemistry (Chem 1A) attrition rate (which is evident district-wide). Just this semester, all Peralta chemistry departments have collaborated to implement a district-wide Chem 30A level prerequisite for Chem 1A.

- Attach a summary depicting the program's progress on assessment of course and program level outcomes (SLOs and PLOs). Please evaluate your program's progress on assessment. What are the plans for further assessments in the upcoming academic year? Please include a timeline and/or assessment plan for the future.

  Chemistry course assessments of SLOs are up to date and in Taskstream. (Contact is Eileen Clifford.)

- What does your program do to ensure that meaningful dialogue takes place in both shaping and assessing course and program level outcomes? Where can one find the evidence of the dialogue?

  Chemistry faculty talk to each other and are mutually supportive. As a result, most of us have adopted American Chemical Society standardized exams as an excellent metric by which we can compare COA chemistry student outcomes with the rest of the country.

- Describe your plans for improvement projects based upon the assessment results. Attach evidence (the assessment report from TaskStream, departmental meeting notes, or the assessment spreadsheet showing these results).

  Due to high Chem 1A attrition at Peralta, chemistry departments have agreed on district-wide implementation of a Chem 30A prerequisite for Chem 1A. This recommendation has just been cleared by CIPD.

  COA does not currently offer degrees in the physical sciences and so this is planned for the long term. The existence of physical science transfer degrees, particularly in chemistry, would give COA a reason to implement PLOs and a metric by which PLOs could be assessed in the physical sciences.

VI. Additional Questions

N/A

VII. New Resource Needs Not Covered by Current Budget

- **Human Resources:** If you are requesting new or additional positions, in any job classification, please explain how new positions will contribute to increased student success.

Human Resource Request(s)	Already Requested in Recent Program Review?	Program Goal (cut and paste from program review)	Connected to Assessment Results and Plans?	Contribution to Student Success	Alignment with College Goal (list the goal)	Alignment with PCCD Goal (A, B, C, D, or E) (list the goal)
Hire two full time faculty. **Hire a full time lab tech competent in handling hazardous chemicals and with inventory control management skills.** Need student TAs, tutors and lab assistants. Need instructional assistants.	**Yes** **Yes** **Yes** Yes			**PT turnover is very high. Students do better with experienced FT faculty.** **Students deserve a safe low risk laboratory environment which is efficiently managed and stocked.** **Tutoring and laboratory assistance.** **Free up instructor for more student contact time.**		

- **Technology and Equipment:** How will the new technology or equipment contribute to student success?

Technology and Equipment Request(s)	Already Requested in Recent Program Review?	Program Goal (cut and paste from program review)	Connected to Assessment Results and Plans?	Contribution to Student Success	Alignment with College Goal (list the goal)	Alignment with PCCD Goal (A, B, C, D, or E) (list the goal)
Computer upgrades and software licenses including Mathematica renewal and Matlab original license. Spectrometers, balances, oven, constant temperature baths, Vernier computing devices for refurbished D-109 chem lab. Electron Microscope with EDS attachment to share with Physics, Geology and Biology.	Yes Yes			These are standard tools in academia and industry for which student expertise increases hire-ability and transfer-ability. These are standard laboratory tools in academia and industry for which student expertise increases hire-ability and transfer-ability.		

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- **Facilities:** Has facilities maintenance and repair affected your program in the past year? How will this facilities request contribute to student success?

Facilities Resource Request(s)	Already Requested in Recent Program Review?	Program Goal (from program review)	Connected to Assessment Results and Plans?	Contribution to Student Success	Alignment with College Goal (list the goal)	Alignment with PCCD Goal (A, B, C, D, or E) (list the goal)
Renovate and refurbish D-109/105 main campus chemistry lab including re-plumbing of water and gas, and new student lab bench furniture. Chemical stockroom/prep area similarly needs refurbishing including lab bench furniture and plumbing. (Three new hoods were recently installed.)	Yes			Adequate infrastructure for basic chemistry laboratory studies.		
DI water system	No					
Compressed air system	No			Standard laboratory infrastructure.		
Renovate and refurbish D-119 chemistry demo prep area with shelving, lab	Yes, but not sure what year.			Standard infrastructure for chemistry demonstrations.		

bench and D-119 lecturn with gas and water.						

- **Professional Development or Other Requests:** How will the professional develop activity contribute to student success? What professional development opportunities and contributions make to the college in the future?

Professional Development or Other Request(s)	Already Requested in Recent Program Review?	Program Goal (from program review)	Connected to Assessment Results and Plans?	Contribution to Student Success	Alignment with College Goal (list the goal)	Alignment with PCCD Goal (A, B, C, D, or E) (list the goal)
Funding for field trips and conferences.	Yes			Student participation field trips and conferences generates enthusiasm and increases their exposure to science as practiced in the real world. Faculty participation keeps professors current in their field(s).		
Funding for Chem 1B and other lab manual rewrites.	Yes			Clearly written procedures are conducive to students ' understanding.		

Approved by the District Academic Senate, May 20, 2016

Endorsed by the Planning and Budgeting Council, May 27, 2016

College of Alameda

MISSION

The Mission of College of Alameda to serve the educational needs of its diverse community by providing comprehensive and flexible programs and resources that empower students to achieve their goals.

VISION

The Vision of College of Alameda is that we are a diverse, supportive, empowering learning community for seekers of knowledge. We are committed to providing a creative, ethical and inclusive environment in which students develop their abilities as thinkers, workers and citizens of the world.

VALUES

We use this vision to choreograph three central themes in our quest for "learning excellence" and services to students.

∗ Academic Excellence

∗ Budgetary Competence

∗ Community Engagement

We call these "our ABCs" emphasizing crucial success indicators for our students in achieving an enhanced capacity to pursue their dreams!

College of Alameda Institutional Learning Outcomes

1. Solve problems and make decisions in life and work using critical thinking, quantitative reasoning, community resources, and civil engagement.

2. Use technology and written and oral communication to discover, develop, and relate critical ideas in multiple environments.

3. Exhibit aesthetic reflection to promote, participate and contribute to human development, expression, creativity, and curiosity.

4. Engage in respectful interpersonal communications, acknowledging ideas and values of diverse individuals that represent different ethnic, racial, cultural, and gender expressions.

5. Accept personal, civic, social and environmental responsibility in order to become a productive local and global community member

District-College Strategic Goals & Institutional Objectives

Strategic Focus: Our focus this year will be on student success in the core educational areas of basic skills/ESOL (English for speakers of other languages), transfer, and CTE (career technical education) by encouraging accountability, outcomes assessment, innovation and collaboration while spending within an established budget.

Strategic Goals	
A: Advance Student Access, Equity, and Success	**A.1 Student Access:** Increase enrollment for programs and course offerings in the essential areas of basic skills/ESOL, CTE and transfer to achieve the District target of 19,355 RES FTES. **A.2 Student Success:** Increase students' participation in SSSP eligible activities by 50%, with specific emphasis on expanding orientations, assessments, academic advising and student educational plans. **A.3 Student Success:** Using baseline data, increase student engagement in activities such as student governance, student life activities, Student leadership development, service learning programs, learning communities, student employment, etc. **A.4 Student Equity Planning:** Address the achievement gap through fully developing and implementing the student success and equity plans at each campus.

B: Engage and Leverage Partners	**B.1 Partnerships:** Develop a District-wide database that represents our current strategic partnerships and relationships. **B.2. Partnerships:** Expand partnerships with K-12 institutions, community based organizations, four-year institutions, local government, and regional industries and businesses.
C: Build Programs of Distinction	**C.1 Student Success:** Develop a District-wide first year experience/student success program. **C.2 Student Success:** Develop an innovative student success program at each college.
D: Strengthen Accountability, Innovation and Collaboration	**D.1 Service Leadership:** Provide professional development opportunities for faculty, staff and administrators that lead to better service to our students and colleagues. **D.2 Institutional Leadership and Governance:** Evaluate and update policies and administrative procedures and the PBIM participatory governance structure.