

## VII. Opportunities for the Future

### A. Future Labor Markets

Within the AVC Three-County Region (Kern, Ventura, Los Angeles) roughly 179,000 annual job openings are projected between 2012-2022 due to retirements and new jobs created through growth in the economy. Occupations with the most job openings are forecasted to generate more than 101,000 jobs annually, roughly 57% of all job openings. The top three occupations with the most openings are: (1) personal care aides; (2) retail salespersons; and (3) combined food preparation and serving workers, including fast food. However the median wage for these jobs ranges from \$9 to \$12 per hour.

As it is commonly the case, most of the openings require a high school diploma or less education for entry, but 21% of the anticipated occupational openings require a bachelor’s degree or higher for entry.

Table \_\_: AVC Regional Projected Annual Job Openings 2012-2022

Entry Level Education	Average Annual Job Openings Total			Total	% of Total	% of Total
	Kern	Los Angeles	Ventura			
Less Than high School	5,672	57,849	5,089	68,610	38.4%	
High School Diploma or Equivalent	3,802	48,610	4,244	56,656	31.7%	
				<i>Subtotal</i>		70.1%
<i>Some College, No Degree</i>	157	1,720	166	2,043	1.1%	
<i>Postsecondary Certificate</i>	679	7,525	526	8,730	4.9%	
<i>Associate's Degree</i>	370	5,297	345	6,012	3.4%	
				<i>Subtotal</i>		9.4%
<i>Bachelor's Degree</i>	1,416	26,841	1,867	30,124	16.9%	
<i>Master's Degree</i>	158	2,343	148	2,649	1.5%	
<i>Doctoral or Professional Degree</i>	158	3,500	176	3,834	2.1%	
				<i>Subtotal</i>		20.5%
<b>Totals</b>	<b>12,412</b>	<b>153,685</b>	<b>12,561</b>	<b>178,658</b>		

Source: California Employment Development Department, Labor Market Information; analysis by Cambridge West Partnership, LLC

In an effort to identify new program areas that would meet labor market needs in the AVC Three-County Region, an analysis was completed of the occupations expected to provide 50 or more job openings annually through 2022. The list was subdivided using the Bureau of Labor Statistics’ training-level definitions with a focus on those occupations requiring between a bachelor’s degree and high school diploma. The most promising occupations are those with the highest number of projected annual average total jobs. The tables were sorted in descending order on that data column and are located in the Appendix E of this Plan.

The occupations that meet the criteria were mapped, through the Standard Occupational Classification (SOC) codes and Taxonomy of Programs (TOP) codes, to Associate Degree and Certificate of Achievement programs offered by the nine area colleges (Antelope Valley, Bakersfield, Cerro Coso, College of the Canyons, Los Angeles Mission, Traft, Victor Valley, Moorpark, Oxnard, and Ventura). The *average* number of awards granted by these nine colleges for each TOP code that matched an occupation was provided for comparison to the *average annual* EDD estimate of job openings in those occupations. Each table also contains a column to indicate if Antelope Valey College has an established program of study that is aligned to the occupation.

Because some of the occupations map to one or more TOP codes used by the community college system, there can be multiple programs using different TOP codes offered for each occupation. For that reason, some of the occupations have more than one row in the tables. Details regarding the requisite knowledge, skills, and abilities for each occupation can be found at the U.S. Bureau of Labor Statistics website <https://www.onetonline.org>.

By way of summary, for the detailed tables included in Appendix E the following tables provide a quick overview of the projected job openings grouped by expected preparation then by major occupational groups. Middle skills occupations are defined as those that require more than a high school diploma but less than a bachelor’s degree as preparation for entry-level positions. In the AVC Three-County Region, EDD projects 16,700 new job openings as the average annual count for these occupations.<sup>1</sup>

Table \_\_: Projected Job Openings

Major Occupational Group Description	Entry Level Education	2012-2022 Annual Average Openings			
		Kern	Los Angeles	Ventura	Total
Management Occupations	BA	310	5,914	466	6,690
Business & Financial Operations Occupations	BA	269	6,591	484	7,344
Computer and Mathematical Occupations	BA	78	2,361	142	2,581
Architecture and Engineering Occupations	BA	159	1,594	154	1,907
Life, Physical, and Social Science Occupations	BA	30	537	44	611
Community and Social Service Occupations	BA	86	892	55	1,033
Education, Training, and Library Occupations	BA	351	3,436	276	4,063
Arts, Design, Entertainment, Sports, and Media Occupations	BA	50	3,815	117	3,982
Healthcare Practitioners and Technical Occupations	BA	25	474	10	509
Personal Care and Service Occupations	BA	25	234	39	298
Sales and Related Occupations	BA	28	808	78	914
Office and Administrative Support Occupations	BA		21	2	23
Farming, Fishing, and Forestry Occupations	BA	5	11		16
Transportation and Material Moving Occupations	BA		153		153
	<b>Total</b>	<b>1,416</b>	<b>26,841</b>	<b>1,867</b>	<b>30,124</b>

Source: California Employment Development Department, Labor Market Information; analysis by Cambridge West Partnership, LLC

<sup>1</sup> California Employment Development Department. *Labor Market Information, Occupational Projections for Kern, Los Angeles, and Ventura Counties*. Retrieved November 3, 2015 from <http://www.labormarketinfo.edd.ca.gov>

Table \_\_: Projected Job Openings (continued)

Major Occupational Group Description	Entry Level Education	2012-2022 Annual Average Openings			
		Kern	Los Angeles	Ventura	Total
Management Occupations	AA		4		4
Computer and Mathematical Occupations	AA	9	328	16	353
Architecture and Engineering Occupations	AA	45	344	35	424
Life, Physical, and Social Science Occupations	AA	42	249	33	324
Legal Occupations	AA	13	283	21	317
Education, Training, and Library Occupations	AA	48	517	42	607
Arts, Design, Entertainment, Sports, and Media Occupations	AA	1	58		59
Healthcare Practitioners and Technical Occupations	AA	205	3,307	192	3,704
Healthcare Support Occupations	AA		72	6	78
Personal Care and Service Occupations	AA		13		13
Sales and Related Occupations	AA		6		6
Installation, Maintenance, and Repair Occupations	AA	2	63		65
Production Occupations	AA		20		20
Transportation and Material Moving Occupations	AA	5	33		38
	<b>Total</b>	<b>370</b>	<b>5,297</b>	<b>345</b>	<b>6,012</b>

Source: California Employment Development Department, Labor Market Information; analysis by Cambridge West Partnership, LLC

Table \_\_: Projected Job Openings (continued)

Major Occupational Group Description	Entry Level Education	2012-2022 Annual Average Openings			
		Kern	Los Angeles	Ventura	Total
Business & Financial Operations Occupations	Certificate		6		6
Legal Occupations	Certificate		26		26
Education, Training, and Library Occupations	Certificate	13	127	15	155
Arts, Design, Entertainment, Sports, and Media Occupations	Certificate	4	223		227
Healthcare Practitioners and Technical Occupations	Certificate	92	1,557	76	1,725
Healthcare Support Occupations	Certificate	233	2,712	224	3,169
Protective Service Occupations	Certificate	30	264	15	309
Personal Care and Service Occupations	Certificate	19	793	51	863
Installation, Maintenance, and Repair Occupations	Certificate	82	757	62	901
Production Occupations	Certificate	27	249	26	302
Transportation and Material Moving Occupations	Certificate	179	811	57	1,047
	<b>Total</b>	<b>679</b>	<b>7,525</b>	<b>526</b>	<b>8,730</b>

Source: California Employment Development Department, Labor Market Information; analysis by Cambridge West Partnership, LLC

Table \_\_ : Projected Job Openings (continued)

Major Occupational Group Description	Entry Level Education	2012-2022 Annual Average Openings			
		Kern	Los Angeles	Ventura	Total
Computer and Mathematical Occupations	Some College	23	536	33	592
Education, Training, and Library Occupations	Some College	127	1,126	120	1,373
Installation, Maintenance, and Repair Occupations	Some College	7	58	13	78
	<b>Total</b>	<b>157</b>	<b>1,720</b>	<b>166</b>	<b>2,043</b>

Source: California Employment Development Department, Labor Market Information; analysis by Cambridge West Partnership, LLC

In October 2014 the Institutional Effectiveness, Research, and Planning Office of Antelope Valley College conducted an online survey of businesses that were on a contact list maintained by the Greater Antelope Valley Economic Alliance (GAVEA). Of the 23 businesses that responded many expected to hire more employees in 2015-16. The businesses surveyed indicated that most of the personnel they hire typically require an Associate Degree or less education to start work.

These firms indicated that the current employees had some training needs in some of these areas:

1. ESL;
2. Computer training such as excel and adobe illustrator;
3. Continuous training on new systems;
4. Ongoing safety and technical training;
5. Manufacturing technologies, particularly computer numeric control training; and
6. Nursing, management, and clinical competence training.

The greatest training need appeared to be for nursing-related training. Nursing personnel and specialty-trained technicians were the positions with the biggest shortage of workers. Based on this survey, the greatest projected growth in employment opportunities is from the Palmdale Regional Medical Center.<sup>2</sup>

The College currently offers an array of instructional programs, some of which may address these expressed interests. The revival of community and contract education services may be of particular assistance to these employers.

An inventory of the instructional programs offered by AVC is found in Appendix C of this Plan along with a count of awards granted to students over the last five academic years. The inventory has been annotated by placing a Taxonomy of Program (TOP) code in **bold** if the code matched to one or more of the Standard Occupational Code (SOC) values in the list of occupations projected to provide 50 or more annual job openings between 2012 and 2022.<sup>3</sup> AVC offers 65 degree and 24 certificate programs that were a

<sup>2</sup> Meeta Goel and Svetlana Deplazes. *2014 Antelope Valley Labor Market Study*. Greater Antelope Valley Economic Alliance.

<sup>3</sup> California Community College Chancellor’s Office. *TOP to SOC to CIP Crosswalk*. Spring 2015.

direct match. However, many other programs align to other occupations that were projected to have fewer than 50 annual openings. The most popular fields of study at AVC are LAS: Social/Behavioral Science and LAS: Math and Sciences.

Some of the programs of study offered by Antelope Valley College are intended to facilitate transfer to a California State University (CSU) campus. The Legislature enacted and the Governor signed the Student Transfer Achievement Reform Act (SB 1440) in September 2010 in an effort to streamline transfer to the public university system where most California community college students migrate. The act enables the two public systems to collaborate on the creation of Associate Degree transfer (AD-T) programs. Upon completion of the Associate Degree, the student is eligible for transfer with junior standing into the CSU system with guaranteed admission and priority consideration when applying to a particular program of study that is similar to the student's community college major.

As of spring 2016 there are 36 transfer model curriculums (TMC) upon which the faculties of the community college and CSU systems have agreed. Three of the thirty-three are uniquely appropriate for more rural community colleges with an agriculture curriculum. An updated, complete listing is available at this C-ID URL <https://c-id.net/degreereview.html>.

The extent of curriculum alignment between the programs of study at AVC and the most popular fields of study throughout the California State University (CSU) is noted in the following table.

Table \_\_: Most Popular CSU Majors, Transfer Model Curriculums and Antelope Valley College Degrees Established

TMC	TOP	Antelope Valley College AD-T Scorecard			
		Established	Due	In Progress	Interested
Administration of Justice	210500	X			
Agriculture Plant Sciences	010300			IP	
Anthropology	220200	X			
Art History	100100	X			
Biology	040100		X		
Business Administration	050500	X			
Chemistry	190500			IP	
Communication Studies	150600	X			
Early Childhood Education (ECE)	130500	X			
Economics	220400	X			
Elementary Education	490120				yes
English	150100	X			
Film, Television, Electronic Media	060420				yes
Geography	220600	X			
Geology	191400	X			
Global Studies	221020				
History	220500	X			
Kinesiology	127000	X			
Mathematics	170100	X			
Music	100400	X			
Nutrition & Dietetics	130600			IP	
Philosophy	150900	X			
Physics	190200	X			
Political Science	220700	X			
Psychology	200100	X			
Public Health Science	120100				yes
Sociology	220800	X			
Spanish	110500	X			
Studio Arts	100200	X			
Theater	100700	X			
<b>Total</b>		<b>22</b>	<b>1</b>	<b>3</b>	<b>3</b>
IP= faculty actively working on the degree proposal					

Source: California Community College Chancellor's Office, Academic Affairs Division. *SB 1440 Legislation Update*. March 31, 2016; interviews and analysis by Cambridge West Partnership, LLC

In summer 2015 the University of California announced a new academic roadmap for California community college students who planned to transfer to a UC campus. It is intended to simplify the admissions process and help students better prepare for transfer to the university and to graduate within two years of admission. Although the pathways

curricular directions are not a guarantee of admission, they are intended to help the university achieve its goal of a 2:1 ratio of freshmen to transfer students.

The extent of curriculum alignment between the programs of study at AVC and the most popular fields of study throughout the University of California (UC) is noted below.

Table \_\_: Most Popular UC Majors, Transfer Model Curriculums and Antelope Valley College Degrees Established

TMC	UC Transfer Pathway	Antelope Valley College AD-T Scorecard			
		Established	Due	In Progress	Interested
Anthropology	X	X			
Biology	X		X		
	Biochemistry				
Business Administration	X	X			
	Cell Biology				
Chemistry	X			IP	
Communication Studies	X	X			
Computer Science	X				
Economics	X	X			
	Electrical Engineering				
English	X	X			
Film, Television, Electronic Media	X				yes
History	X	X			
Mathematics	X	X			
	Mechanical Engineering				
	Molecular Biology				
Philosophy	X	X			
Physics	X	X			
Political Science	X	X			
Psychology	X	X			
Sociology	X	X			
<b>Total</b>	<b>21</b>	<b>12</b>	<b>1</b>	<b>1</b>	<b>1</b>

IP= faculty actively working on the degree proposal

Source: Retrieved April 29, 2016 from [Admission.universityofcalifornia.edu/transfer/preparation-paths/index.html](http://Admission.universityofcalifornia.edu/transfer/preparation-paths/index.html); California Community College Chancellor’s Office, Academic Affairs Division. *SB 1440 Legislation Update*. March 31, 2016; interviews and analysis by Cambridge West Partnership, LLC

Aerospace and related support businesses as well as advanced manufacturing are key employment clusters in the Antelope Valley area. Several major employers informally have expressed intent to hire new employees along these lines:

- **Northrop Grumman and Lockheed-Martin** leadership believes they will need 300 to 500 mechanics in the next two years. Northrop Grumman was awarded the U.S. Air Force long-range strike bomber (LRS-B) contract valued at \$80 billion. Congressional arbiters have backed the contract award. The next challenge is to deliver on the contract obligations. They have been generous in providing equipment and supplies for the College’s aerospace programs.
- **BYD Motor Factory** projected having 400 jobs in building electric buses.

- **Air Force Plant 42**, located in Palmdale is synonymous with advanced and black aviation programs. Senior management there indicated that they will not see any reduction in their work and will need people.
- **Morton Manufacturing** indicated that it would need people. A small, minority, woman-owned business (founded 1967). It is the leading supplier of nickel-alloy bolts for gas-turbine aircraft engines as well as aero derivative gas-turbine engines for industrial use worldwide.
- **Kinkisharyo International** indicated that it expects to be hiring employees. Located in Palmdale, it is a light-rail car-manufacturing firm that builds for urban transit agencies worldwide. It is the number one supplier of low-floor, light-rail vehicles in North America
- **U.S. Pole Co. Inc.** indicated it would need people. It is an outdoor lighting company located in Palmdale and is the parent company to U.S. Architectural and Sun Valley Lighting firms.

The commonality that cuts across these companies is their desire to hire new employees with skills sets that could be adapted to any of their firms.<sup>4</sup>

## B. Planning Considerations for Potential New Programs

The College has a well-established curriculum review and approval process. A shared-governance Curriculum Committee provides oversight to the process that includes both a technical and a substantive review of new curriculum ideas. Faculty members and division instructional deans propose new courses and programs but the Curriculum Committee and College administration critique, evaluate, set priorities, and recommend proposals to the Board of Trustees. The criteria they use to evaluate the visions for future curriculum outlined above is similar to those adopted by the Chancellor's Office as discussed below.

Given the current California higher education public policy environment, priority should be given to programs intended for transfer preparation that have been developed around the Transfer Model Curricula (TMC). Priority should be given to career and technical education programs that fall within the primary areas of emphasis agreed upon through regional discussions. The labor market data analysis provided in the initial segment of this chapter and the evolving list of TMCs developed around the most popular majors within the CSU system point to the primary areas for future program development that would serve students well.

The Chancellor's Office has a set of long-established criteria to use when evaluating new instructional program proposals. It encourages individual colleges and districts to use the same or similar criteria when evaluating a curriculum proposal. Those five criteria are as follows:

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<sup>4</sup> Edward Knudson, Superintendent-President Antelope Valley College. *Interview*. February 17, 2016; Community Advisory Committee. *Meeting Notes*. March 23, 2016.



### **Appropriateness to the Mission**

The proposed program and required courses must be aimed at the first two years of postsecondary instruction. The curriculum has to be congruent with the mission of the California community colleges as described in Education Code section 66010.4 and with the mission statement and master plan of the college and district. The proposal must clearly articulate the content or skills whose mastery forms the basis of the student learning outcomes. The proposed program must also address an occupational or transfer area that is valid for the region and institution. The courses and program must not be primarily avocational or recreational. Non-instructional activities and services are not considered to be courses and are not supported by apportionment.

### **Need**

New curriculum must reflect the engagement of an educational planning process resulting from systematic program review that includes assessment of future needs and goals of the educational programs of the institution. The proposed program application must document the transfer applicability as meeting lower division requirements for a major program of study at a baccalaureate institution.

The need for noncredit college preparation or career development curriculum is presumed to exist if there is a student demand for the program and either their transitions to credit work or its fulfillment of labor market needs has been documented.

Career and technical education (CTE) program proposals intended to prepare students for entry-level employment must provide evidence via labor market data or a recent employer survey that documents a need for the program and opportunities for program graduates to secure future employment in the region. Statewide or national labor market evidence is considered as supplementary information. Industry or regional economic studies may be helpful evidence. Letters from employers attesting to the need in the area and minutes of advisory committee meetings are useful evidence only in conjunction with other evidence. Applicable studies or data from licensing agencies or professional associations and job advertisements for positions in the service area are helpful additional evidence. The CTE program proposals must also secure the approval of the regional consortium of occupational deans so that duplication of programs is minimized. Additional suggested areas of discussion for labor market analysis are located in Appendix D of this Plan.

### **Curriculum Standards**

The local curriculum committee, governing board, and program accreditor (when applicable) must apply the standards set forth in the Course and Program Approval Handbook and in the Title 5 Regulations. The college curriculum committee and the district governing board must approve all courses and new program proposals. The career and technical education regional consortia must review all CTE curriculum and new program proposals. The proposed program must also be consistent with requirements of any accrediting agencies where applicable.

The college must provide a description of the local approval process along with supporting documentation from advisory committees, local industry, and/or transfer institutions. The proposal process should ensure that the program is designed so that successful completion of the program requirements will enable students to meet the program goals and learning outcomes. Program required courses should be integrated with courses designed to effectively meet their goals and learning outcomes.

The Academic Senate for the California Community Colleges (ASCCC) provides additional information about best practices for curriculum development that are useful. Unless the web link has changed, curriculum resource materials are available at [www.asccc.org/directory/curriculum-committee](http://www.asccc.org/directory/curriculum-committee) as of fall 2015.

### **Adequacy of Resources**

The institution must demonstrate that it has the resources to realistically maintain the program at the level of quality described in the proposal. That includes funding for qualified faculty to teach the curriculum of the proposed program, sufficient and adequate facilities and equipment, and essential library and learning resources to support the instruction. The institution must also commit to offering the required courses in the program at least once every two years and have faculty available to sustain the proposed required courses. It is incumbent upon the proposing college to carefully ascertain the space/facilities needs for a new program using the State facilities space standards.

### **Compliance**

The design and proposed operation of the program may not be in any conflict with any licensing, state or federal law or regulation.

Although not required, the current thinking among occupational educators is that programs leading to industry-recognized certifications and programs designed with stackable certificates are highly desirable attributes of proposed CTE programs.

## **C. Faculty Vision for Curriculum, Potential Related Facilities Implications**

A listing of future curriculum visions articulated by faculty members in each division and the future delivery of administrative and student services was developed. The future visions were based upon responses to a questionnaire, interviews and listening sessions, open house events, and inspection of recent comprehensive program review documents. The ideas were divided into two groups: (1) those for which some curriculum work had been started, or was recently approved or modified and (2) those for which the idea was still percolating with an undetermined action/implementation date. From these curricular visions interest in some potential additional facilities was identified. By division faculty members and deans were also asked to identify aspects of the current facilities that were not working well for their programs. The lists and discussions below summarize those visions of a potential future.

In the listings below the following distinctions should be applied regarding instructional practices where distance education instruction is involved.

Online courses are designed for all instruction to take place online with no requirement for students to meet on campus at any time during the term.

Hybrid courses are designed for all instruction to take place online. However, students will be required to meet on campus for orientation, exams, quizzes, or other non-instructional activities.

Blended courses are designed for instruction to take place both in the classroom and online. Students will be required to engage in both formats during the term.<sup>5</sup>

#### *Athletics, Kinesiology, Visual and Performing Arts Division*

- Curriculum Started, Recently Approved or Modified
  - Kinesiology curriculum was restructured to promote transfer (less activity, more lecture and laboratory).
  - Several new local program certificates of achievement are being created in professional fitness, recreational leadership, coaching, aquatics, and yoga instruction. The intent is to better match courses offerings with the local community interests.
  - An AD-T in Theater Arts has been approved.
  - An Associate Degree in Theater is being developed to address non-transfer, local interests.
  - An Associate Degree in Dance is being developed and has had one review at the state level.
  - The music discipline has experimented with offering some online classes (world music and music appreciation).
  - The curriculum in commercial photography is being completely revised.
- Ideas Percolating, Undetermined Implementation Date
  - A Graphic Arts AD-T is being developed. The college faculty members in digital media arts are interested in that discipline as a potential transfer degree they could host.
  - The faculty members in the disciplines of film, television, and media are evaluating the possibility of the College implementing the AD-T in this discipline.

#### *Facilities Implications*

- The current kinesiology facilities were built in the 1960s and have never been and cannot now be modernized. The following different and more modern facilities are needed to support the new kinesiology curriculum.
  - Coed training room
  - Locker facilities
  - Swimming pool
  - Strength and conditioning facility

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<sup>5</sup> Antelope Valley College, Academic Policies and Procedures Committee. *Distance Education Course Categories*. Approved April 2016.

Additionally, new facilities are needed to support the refocused kinesiology curriculum.

- Human performance lab
- Fitness center
- Another full-sized gymnasium
- The fine arts quad on campus includes some of the oldest buildings at AVC and they require major system renovations and upgrades. Some work has been accomplished, but much more needs to be done.
- The photography program instructional space has significant shortcomings.
- The FA4 building is used by several VAPA disciplines, but the rooms have serious shortcomings as instructional spaces.
- The faculty members in the music programs are interested in a new building and desire continued renovation of the current FA3 building.

#### *Technology Implications*

- Many of the art, music, and theater teaching spaces have been using very outdated instructional technology. There is an interest in smart classroom technology.

#### *Behavioral and Social Sciences Division*

- Curriculum Started, Recently Approved or Modified
  - None at this time
- Ideas Percolating, Undetermined Implementation Date
  - The division faculty members are considering offering more online or hybrid class sections. The latter only requires a student to attend an orientation and to be on campus for exams during the term.
  - There is some discussion about the Child and Family Education program curriculum that might be required for students who are interested in working in primary and secondary education settings. These students may be able to build upon their CFE degree. The AD-T in Elementary Education is a potential model.
  - Faculty members in the behavioral sciences are contemplating the development of a certificate in addiction studies.
  - Faculty leaders believe that the field of psychology is moving toward inclusion of more neural psychology, but additional courses in that specialty are not part of the state-approved transfer degree model.
  - The history faculty leaders are interested in additional courses that would give students a global perspective, e.g. Russian and/or Islamic history. However, the state-approved transfer degree model does not include those specialties.
  - Faculty members may be interested in exploring the viability of AD-Ts in Global Studies and Social Justice
  - The history and political science faculty members would like to see the Model UN program revived.

- There is some interest within the administration of justice faculty members to develop curriculum in cyber security, forensic anthropology, and photography to complement new program ideas being fostered in business, visual arts, anthropology, and life science areas.

#### *Facilities Implications*

- The division leadership expressed a need for additional classrooms during impacted times. At times faculty willing to teach an extra large class find that large lecture rooms but many are sometimes used by a class with a normal size enrollment.
- Long-term visions include a separate division building and expansion of the Child and Family Education program facilities.

#### *Technology Implications*

- Faculty members in the Division are interest in more blended/hybrid instruction and an institutional commitment to refresh instructional technology.

#### *Career and Technical Education Division- Business and Computer Information Systems*

- Curriculum Started, Recently Approved or Modified
  - The Computer applications program curriculum is being reviewed to determine updated needs based upon:
    - CompTIA released a list of expanded competencies for A+ Certification including the following:
      - Windows 10 Introduced in 2015. Temporary support for Win 8.1 and 7 will soon end;
      - Apple Macintosh equipment and O/S support;
      - Linux operating system support;
      - mobile devices; and
      - computer & network security for the above items.
    - Updated Microsoft's support as follows:
      - classes to instruct Windows Server 2012 R2 that was released in 2012; and
      - the announced release of Windows Server 2016 by the third quarter of 2016.
  - The faculty members in the Computer Applications Department will be writing a grant application to participate in the Bay Area Netlabs+ consortium. They are also discussing virtualizations with textbook publishers as an option for some laboratories.
  - The Computer Applications Department faculty members are gathering curriculum and program examples for a cyber security certificate. They have perceived a potential need for additional computer literate employees at various growing industries/companies (Northrup-Grumman, BYD Auto, Space-X, medical and clean energy and water firms) in the Greater

- Antelope Valley. They have support from the Information Systems Audit and Control Association (ISACA) and possibly others such as CompTIA.
- The Computer Applications Department faculty members are encouraging students to acquire industry certifications as required by DOD Regulation 8579.1m.
  - The Office Technology Department faculty members are conducting research to develop a medical billing and coding program. The Office Technology program advisors have indicated that there is a need for a focused program of this sort and for more graduates to have skills with Microsoft-based products.
  - A Business Information Worker Certificate program, with heavy emphasis on skills with Microsoft-based products, is needed to meet current industry demands. The Office Technology Department faculty members are exploring ways to change the current Administrative Assistant Certificate into this new program.
  - Engineering curriculum is being updated to meet C-ID standards and ensure that it is transferable to the California State University and University of California institutions, both of which are slowly adopting these standards. They are also each developing methods to decrease unit counts to be close to the 120-unit mark.
  - The Clothing & Textiles-Fashion Design program curriculum has been overhauled to provide better clarity to objectives and easier access to classes.
  - The Interior Design Department faculty members have proposed adding the computer-aided drafting course as a requirement in their program.
- Ideas Percolating, Undetermined Implementation Date
    - There is a potential to offer more business courses through distance education, particularly those for currently employed students.
    - Management program faculty members believe more entrepreneurially oriented courses need to be offered. They also think classes need to be offered in online and hybrid modalities as well as traditional methods.
    - The marketing curriculum faculty members are considering refocusing to modernizing the courses for current marketing trends by utilizing more technology and social media. Perhaps the focus should be on small businesses and utilization of the Internet. They also believe courses should be available online and in hybrid format.
    - The real estate curriculum needs to provide students with more computer laboratory experience in processing forms, etc. and more real world transaction experience, perhaps through a work experience course.
    - The Computer Information Systems (CIS) Department faculty members are anticipating a need to develop curriculum in mobile platform programming.
    - The Computer Applications Department personnel anticipate that more programming and programming languages, updated office suite

applications, and networking curriculum will be needed along with instruction in cloud technology and virtualization.

- The Engineering Technology program will be reviewed to either better align with local industry or deleted if found to be obsolete. The local employers need prospective technical employees to work in mechanical or electrical engineering fields.
- Engineering faculty members expressed an interest in offering hybrid or online courses that are more convenient for working students. Research is being conducted at two California community colleges on these online or hybrid models to see how well they apply in engineering courses.
- The Clothing & Textiles-Fashion Design program faculty members are considering additional courses in wardrobe/costuming, computer illustration, and CAD principles. They believe the program needs clarification as a viable transfer option to CSU.

#### *Facilities Implications*

- Additional sections of accounting will be offered to accommodate students in the Business Administration AD-T. More access to computer labs and software will be required.
- Other business area disciplines would benefit from smart classrooms with 35-40 computers. A laboratory/lecture combination room to accommodate at least 35 students would be helpful. Presently, there are too few of them.
- If mobile platform programming curriculum were to be introduced, the CIS discipline might need an additional computer lab to support that instruction.
- The Computer Applications Department faculty members have been involved in the plans for remodeling rooms where there are insufficient computer stations and the equipment is somewhat outdated.
- Enrollments in the engineering lab class need to be divided in half to fit the available laboratory space.
- Engineering faculty members are engaged in the planning phase for a complete remodel of a room to house engineering testing laboratories and other STEM courses.
- Drafting students would benefit from access to the course software in a computing environment that has open access as opposed to the two classrooms with fixed instructional time periods.

#### *Technology Implications*

- There is a potential to increase the online offerings in office technology, if the Business Information Worker and Medical Billing and Coding certificates are created.
- Adaptive technology to assist students with visual and hearing impairments would be ideal in the Office Technology program.
- Engineering faculty members are considering hybrid or online course offerings for some of their curriculum.

- Updated computers will be needed in the drafting and engineering programs to handle 3D CAD-based modeling.
- Access to the Internet for web-based applications in the classroom is highly desired by the Interior Design Department faculty members.

*Career and Technical Education Division- Nursing & Health*

- Curriculum Started, Recently Approved or Modified
  - The registered nursing curriculum was extensively updated over the last five years to reflect the model promulgated by the CSU. The updated curriculum was approved both locally and by state regulatory bodies. The new curriculum was initially implemented in fall 2015.
  - The Respiratory Care Department faculty members are adding simulations and technology to the curriculum to better prepare students for future work assignments.
  - The Fire Academy, Wildland Fire, and Emergency Medical Technology program faculty members are incorporating simulations and technology to prepare students better for future work assignments.
  - The Clinical Medical Assisting program and the Office Technology Department faculty members are conducting research to develop a Medical Billing and Coding program.
  - In the discipline of nutrition faculty members are developing an AD-T based on the state-approved curriculum model.
  - The nutrition faculty members have added online sections in response to student demand.
- Ideas Percolating, Undetermined Implementation Date
  - The microbiology course needs to be revised to change from a five to a four-unit class so that it can be used in transfer degrees.
  - To provide experience in teamwork and collaboration, the Registered Nursing Department faculty members need to develop more complex scenarios that include students from different semesters in the program as well as radiology and respiratory therapy students.
  - The Registered Nursing Department faculty members realize that employers prefer to hire nurses who have completed the bachelor's degree. They are seeking additional partnerships and pathways to multiple four-year institutions so that the AVC nursing students have some choices when they want to enter a B.S. program. The faculty members are also interested in promoting some dual enrollment arrangements for the AVC students.
  - The vocational nursing curriculum is five-years old and needs to be updated.
  - The Radiological Technology Department faculty members believe adding mammography experiences at the clinical hospitals would be a helpful addition to the curriculum.



- The Respiratory Care Department faculty members are considering adding a course in ethics and a sleep disorders certification to the program at a future date.
- The Commission on Accreditation for Respiratory Care, which is the national accrediting body for Respiratory Care programs, announced in January 2016 that they would no longer accept applications for accreditation from new two-year programs. They will continue to accredit existing two-year programs. Most states require a bachelor's degree and employers are starting to prefer prospective employees who have completed a bachelor's degree in this field. In Southern California Loma Linda University has a bachelor's degree program in the field, but does not accept any transfers from community colleges.
- The Fire Academy Department faculty members plan to incorporate a medical component and a standardized evaluation process, both of which are being promoted by the state fire academy network.
- The Wildland Fire Department faculty members anticipate creating one or more full-term courses to replace the short-term (one day, weekend, two-week) courses that have not been offered recently.
- The current medical assisting/administrative medical assistant curriculum needs to be strengthened through analysis and reduction of redundancies and identification of missing material in each curriculum.
- Research needs to be completed to explore the costs of accreditation and equipment that is needed to bring the current laboratory up to the accreditation standards of the Commission on Accreditation of Allied Health Education Programs (CAAHEP).
- If a new Medical Billing and Coding program were to be approved, it would be a candidate for additional online delivery of courses.

#### *Facilities Implications*

- The Registered Nursing Department would benefit from more simulation rooms with reliable, stronger Wi-Fi access signals that would not, as the current Wi-Fi does, interfere with online testing in the building.
- Registered nursing faculty members also identified a need for additional lecture rooms on Mondays.
- Registered nursing faculty members realize that often the local hospitals do not have sufficient pediatric patients to support the required clinical rotation in that field. They are contemplating approaching local clinics that specialize in pediatric medicine to develop clinical site agreements to support the instructional program.
- The Radiological Technology Department faculty members are looking for additional off-campus clinical site facilities to support the required clinical instruction component of the program. They also expressed an interest in additional campus laboratory space to accommodate the mobile x-ray machines.
- The Respiratory Care Department faculty members are seeking additional off-campus clinical facilities to support their program.

- The Wildland Fire Department faculty members expressed an interest in a new facility that would have additional storage space, adequate heating and ventilation, and secure insulation.
- The current laboratory used for the medical assisting and clinical medical assisting programs is shared with the respiratory care program. The Commission on Accreditation of Allied Health Education Programs (CAAHEP) deems the current laboratory space substandard. Should a new medical billing and coding program be initiated, it would require additional laboratory space.

#### *Technology Implications*

- The vocational nursing faculty members indicated a need for better Internet connection in the skills laboratory. They noted that the expansion of virtual instruction (recorded podcasts, virtual hospital, online assessments) would necessitate additional laboratory space in the future.
- The Emergency Medical Technology Department faculty members expressed a need to replace the mannequins in order to maintain program accreditation.

#### *Career and Technical Education Division- Industrial Technology*

- Curriculum Started, Recently Approved or Modified
  - The division faculty members are working to incorporate AVID teaching strategies to better engage students in the learning process.
  - Pipe welding (robotic and manual) is being added to the Welding curriculum. The College is presently a testing site for the structural steel certification exam.
  - A Bachelor of Science Degree program in Airframe Manufacturing Technology is being created. The program is to start in fall 2016.
  - The Antelope Valley hiring managers are reviewing the drafting curriculum to help shape the future of the program.
  - The ACRV curriculum is being brought up to date to teach the current Department of Energy mandates and to comply with California Title 24 energy efficiency standards.
  - The electrical curriculum is routinely updated every three years to meet changes in the National Electrical Code.
- Ideas Percolating, Undetermined Implementation Date
  - The Electronics Department faculty members are considering new curriculum that would be largely hands-on with only 25% classroom theory to teach troubleshooting, soldering, etc.
  - The Automotive Technology Department faculty members anticipate expanding the curriculum to include technology in diesel and alternative fuels.

- Northrop has asked the Auto Body Department for a course on aircraft refinishing. The faculty members are contemplating expanding the curriculum to include the use of aluminum.
- The aviation industry is also interested in the College developing a course to teach students how to use a virtual painting machine in which no chemicals are dispensed but analysis of painting patterns and thicknesses is simulated.
- The AERO program faculty members plan to restructure the curriculum to accommodate the upcoming changes to the Federal Aviation Administration (FAA) regulations governing their program. This faculty group expressed an interest in offering online courses. They and the AFAB program faculty members believe that future curriculum development should also include avionics and integrated cockpit instruction. A separate program in avionics would be ideal.
- Faculty members in ACRV are intending to do a complete rewrite of their program curriculum.
- The drafting program faculty members are interested in offering online or hybrid courses.

#### *Facilities Implications*

- A potential contract education partnership with Yunnan Traffic Technician College will require additional space, tools and equipment for the AERO program. That space will need compressed air, 220-volt electrical power lines, and classroom and separate computer laboratory space. If as many as 50 students arrive for the program, the College will need additional faculty members.
- The AERO program faculty members believe it would be helpful to co-locate their program with the AFAB program spaces and faculty. The AERO program needs a welding laboratory, separate lead-acid and Ni-cad battery rooms to service batteries, and a small paint booth. The current Fox Field facility does not have room for additional instructional tracks beyond the single day and single evening offerings. The Bachelor of Science degree in Airframe Manufacturing will have an impact on the current facilities used by the AERO and AFAB programs. More space will be needed and is being pursued through negotiations for the Los Angeles Airport authority with the intent of occupying an abandoned museum building at Fox Field.
- The Welding shop is small and the infrastructure is old. Insulation is falling from the walls and ceilings. At a minimum, repairs to the current swamp coolers are needed and additional ones would be helpful. In the long run, a larger, more modern facility is needed.
- Faculty members in the Electrical department indicated that they need additional laboratory space for that program in order to offer both day and evening classes.
- The current facility for electronics is outdated and a new one with proper heating and cooling is needed.
- The existing ACRV laboratory space is too small; therefore, some students work outside. Outside lighting for ACRV evening classes is essential but that will require an electrical upgrade.

- The current Auto Body shop is too small to allow all students to work inside. As a result, some students work outside. Those outside spaces need better outdoor lighting and an electrical system upgraded. A clean area is needed for aluminum repair instruction.
- The facility used by the Automotive Technology Department needs renovation work to make it more modern and useable including the addition of roll-up doors and some additional classrooms. To be current for the industry the program also needs massive updates in equipment and/or repair of existing equipment. The lifts need to be replaced with aboveground lifts and the pits that will be left need to be filled in.
- Faculty members in welding, ACRV, and electrical identified a need to establish a prerequisite, introductory level course to cover basic math, blueprint reading, and tool knowledge to meet the needs of several career and technical programs in the division.

#### *Technology Implications*

- Automotive technology faculty members believe that enhancing more classrooms with technology (smart boards, computer-controlled car systems, etc.) would be helpful.
- Drafting faculty members indicated a need for up-to-date computers to handle the 3D CAD-based modeling software.

#### *Language and Academic Development Division*

- Curriculum Started, Recently Approved or Modified
  - ESL offerings have introduced noncredit courses at the first four levels as of fall 2015.
  - ESL has proposed a certificate for students who complete three of the level-four courses.
  - ESL has offered an online class and plans to offer more credit and perhaps noncredit ESL via the online instructional modality. The department is planning to offer additional classes at the Palmdale Center
  - The reading program has experimented with noncredit curriculum.
  - Reading faculty introduced two sections as hybrid offerings in fall 2015. They are using the Reading Plus online software.
  - Reading faculty members are experimenting with a blended course offering in which 49% of the class time is on campus and the balance is online.
  - Developmental math, English, and reading classes have increased the use of in-class tutors and continue to offer a compressed eight-week schedule.
- Ideas Percolating, Undetermined Implementation Date
  - Expand the vision of the communications program to include media studies.

- English prefers not to change any course designation two levels below transfer to noncredit.
- English faculty members are considering more interdisciplinary and team-teaching offerings.
- The Communications Studies Department faculty members are discussing ways to create more programmatic ties from English to media studies, journalism, film and television, and communication studies as a way to bridge and strengthen the programs of study.
- The Deaf Studies and Interpreter Training Department faculty members are interested in offering more online and hybrid courses.

#### *Facilities Implications*

- Temperatures in classrooms assigned to communication studies are not well regulated.
- Technology (projectors and lighting) often fails, particularly lighting issues, in classrooms assigned to communication studies.
- There are insufficient classrooms that can accommodate 30 students for English instruction.
- More dedicated and centralized space for English instruction, support, and faculty offices is needed.
- English and ESL have no dedicated computer laboratories but would like additional computer labs.
- Re-establishing a study hall for deaf studies students and deaf students referred by DSPS would be helpful. A building to house the Learning Center on the ground floor and the Deaf Studies/Interpreter Training Department on the second floor was proposed in 2011 but still needs to be realized. That building proposal included two classrooms, several offices, storage for ASL videos and other portable technology, a study hall room, and several practice rooms connected to the classrooms. It would be ideal if rooms could also be available at the Palmdale Center, as the discipline would like to offer the program at both Lancaster and Palmdale.
- The Academic Development Department faculty members anticipate completion of room remodeling in the summer of 2016.
- The ESL faculty members requested more smart classrooms.
- The former 2011 plans for a new Learning Center are now outdated and the current Learning Center is little more than a large classroom. Nevertheless, the scope of services provided by the learning specialists has expanded and the Learning Center is commonly full of students.

#### *Technology Implications*

- Many of the classrooms assigned to English lack uniform and reliable technology and/or are compromised by light and sound issues. The rooms offer students a sterile and uninspiring learning environment.
- Enhance the technology for online instruction. The interpreting profession is expanding into online interpreting careers.

- Developmental curriculum faculty members expressed a need for more computers in the classroom as well as more routine maintenance of instructional technology (overhead projectors, VCR units and remotes, document cameras, and computer equipment).

#### *Mathematics and Sciences Division*

- Curriculum Started, Recently Approved or Modified
  - AS-T in Biology has been drafted and is pending local reviews.
  - AS-T in Plant Sciences is being developed.
  - AS-T in Chemistry is being developed.
  - A new chemistry course, CHEM 205, Quantitative Analysis, was established to take advantage of the new gas chromatograph and nuclear magnetic resonance equipment. The course will be part of the contemplated new certificate in Analytical Chemistry-Instrumentation.
  - Faculty members in Anthropology are actively exploring the viability of a certificate in forensic anthropology.
  - Mathematics faculty members have implemented distinct “pathways” for student success in basic skills (where almost 70% of the discipline enrollment is located), CTE, transfer into the humanities and STEM education.
    - In fall 2015 two pathways were introduced: (1) transfer into liberal studies and the humanities; and (2) migration into the disciplines of the STEM careers that require calculus.
    - A new statistics and data analysis course has been introduced using the free statistical package called “R”. The course has been forwarded for evaluation as a transferable course.
    - The redesigned modular approach to basic skills math using EducoSoft self-paced software is being assessed and refined. Initial feedback and success data has been positive.<sup>6</sup>
  - The math faculty members have crafted a second chance opportunity in mathematics for high school students. SMAP is an intervention available in several local high schools for students whose initial placement scores indicate weakness in basic mathematics concepts. Upon completion students may retest and usually place into higher-level mathematics.
  - The BIO 120 lab has been transformed into an inquiry-based, hands-on laboratory experience.
  - Biology and physical science faculty members are providing a limited number of opportunities to incorporate undergraduate research experiences for students. This is a companion to internship opportunities provided to students.
  - Physical sciences curriculum has been restructured in light of the AD-T degrees. More courses have been articulated with four-year professional programs, and active learning methods are being introduced.

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<sup>6</sup> Antelope Valley College, Office of Institutional Effectiveness, Research, and Planning. *Math 099 Success Analysis Fall 2014-2015*.

- Ideas Percolating, Undetermined Implementation Date
  - Upon continued evaluation of the AA-T and AS-T degrees the community college curriculum may be further aligned to the high school programs to ensure seamless matriculation to college and transfer.
  - The life science discipline faculty members are interested in exploring the viability of offering an interdisciplinary Public Health Science AD-T.
  - New elective courses in the Biology AS-T program, including biotechnology has been considered.
  - Create an Environmental Sciences AS-T after the Transfer Model Curriculum is finalized.
  - Introduce an AA in Water Science with new courses in water chemistry, microbiology, resource management and conservation. A full-time faculty member will be needed to bring this idea to fruition.
  - If a scan of the local environment indicates it would be a positive contribution, the Physical Science Department faculty members are interested in creating a certificate in Analytical Chemistry-Instrumentation. Several major local employers have encouraged this consideration.
  - The mathematics faculty members are considering an effort to re-introduce a popular MATH 110, Math for Liberal Arts, course.
  - Division faculty members are working toward establishing a sustainable student undergraduate research program following the guidelines of the National Science Foundation and Center for Undergraduate Research. Faculty members are working to resolve issues such student credit hours, faculty LHE compensations, and degree applicability and transfer issues.

#### *Facilities Implications*

- The Lancaster campus ME and SSV buildings, where many sections of mathematics are taught, are very old and in need of remodel or replacement.
- The division faculty members anticipate using some of the classrooms in the new Palmdale Center to respond to intense enrollment pressure on the division's curriculum.
- A new math course is based on statistical software and will need facilities that support in-class computers as an integral part of classroom activities. Plans are being developed to remodel some rooms in the ME building for this purpose and to accommodate the greater numbers of students engaged in the redesigned modular approach to math basic skills.
- The new modular approach to basic skills math has been well received but it requires additional instructional space with computer workstations for each student. Mathematics faculty members are seeking one large space that would accommodate several activities (tutoring, group discussions, mini lectures, testing areas, workshops, and offices). Classrooms for engineering and mathematics instruction have been included in the proposed high-technology classroom and learning center.

- A renovation of the APL Science Complex is expected to be under way in summer of 2016 and completed for the fall 2016 term. That will open a laboratory for undergraduate research (physical and biological sciences) and create a new engineering testing room. The undergraduate research experience will require additional modules of laboratory research spaces.
- The physical sciences disciplines are at maximum capacity now. Growth will require additional space.
- The rooms in which mathematics are taught need to be equipped with current technology, adequate whiteboard space and proper lighting.

#### *Technology Implications*

- Biological and physical science faculty members have recently experienced performance problems with existing multimedia equipment in some of the rooms and laboratories where they teach.

#### *Workforce and Economic Development, Community and Contract Education*

- Curriculum Started, Recently Approved or Modified
  - The program is just getting re-launched after a period of dormancy.
  - Classes are offered off campus and on campus. The unit took up occupancy in the former Sheriff's Academy building in February 2016. In addition to offerings of community interest (SAT and GRE preparation, Hindi, living trusts, etc.) the program helps workers at local businesses and industries maintain licensing by offering the following kinds of classes:
    - LVN IV Therapy Certification
    - Phlebotomy Certification
    - Food Handlers- ServSafe Manager's Level Certification
    - CA Guard Card
    - Healthcare CEU Certifications through online ed2go courses
  - Program leadership has increased the corporate contract education services to businesses and organizations.
  - Collaborations with the South Bay Investment Board, Goodwill of Southern California, and El Camino College for the ETP program have been established to help economic development work in the community.
- Ideas Percolating, Undetermined Implementation Date
  - Program leadership will be seeking ways to develop classes specifically directed towards:
    - youth (arts and crafts, home economics, etc.);
    - the cultural and economic diversity of the community; and
    - those employees who have external mandates or incentives for continuing education.
  - The program leadership plans to increase marketing of the offerings to the community and respond more promptly to phone calls and emails.



*Student Services Division*

Technology General

The Student Services Area is seeking to exploit technology to reduce paper, eliminate redundant collection of basic data about students seeking services, curtail unnecessary trips to campus, deliver some services, but also to increase opportunities and to carve out time to have “high touch,” face-to-face setting contacts with the students. One goal is to facilitate the student getting what they need without having to come onto the campus.

There is a keen need among the units for technology infrastructure expansion and integration of the technologies. Many of the programs in the area are supported by grants that will not finance office construction or infrastructure work. It would be ideal if the college software could “populate” common student information needed by the various programs so that all office staff could access that common information. As a unit the leadership acknowledges a need to pay more attention to mobile applications and the student use of mobile devices.

The leadership indicated that the College might not have fully exploited the functionality and features of the Ellucian Student Information System. For example, the College does not have any triggers to send out program information to students who have an expressed interest. The College Information Technology staff is working to develop a data block for student services that will serve as a venue for reporting and providing support to programs.

Facilities General

Some common themes regarding facilities needs were as follows: (1) more private office space to converse with students on sensitive topics; (2) the campus has no large, shared multipurpose space that could be used for student services programming; (3) more spaces are needed where students might gather, spend time, build relationships, and engage in informal learning (lounge, study areas, smaller suitably equipped areas with electrical power outlets); (4) computer laboratory spaces adjacent to the office areas would be ideal; (5) there are no good meeting rooms for the various units to use and only one classroom dedicated to the student services area; and (6) the disabled students unit is short on places to proctor exams, particularly in peak periods of mid-terms and finals.

Several units mentioned the critical need to have some offices where the staff can speak with students about private, confidential, sensitive matters or where a student who is agitated, experiencing a “melt down”, or a student with disruptive children can be taken so that others are not disturbed. All of the units need to convey to the students in their programs that the unit is a safe place for the students to be, spend time over break periods between classes, and learn from other students. Building a sense of community would be furthered by such places in the student services area.

Division leadership indicated that it would be ideal if student services could be located closer to where most students are attending classes and further integrate with the academic affairs areas of the college where students spend most of their time.

All of the units have workshops, orientations, and small group meetings with students, but the Student Services Division has only one assigned classroom.

#### *Student Services Division- Counseling & Matriculation*

- Curriculum or Services Started, Recently Approved or Modified
  - The EOP&S office is researching ways to assist students with transportation to and from the Lancaster campus.
  - The EOP&S office has been experimenting with text messaging as a means to communicate to students in the program and has started to develop short videos for recruiting and program information.
  - The Office for Students with Disabilities implemented the Accessible Information Management (AIM) software in spring 2016 to better serve students and to handle specific accommodations.
  - Counseling has been engaged in strategic marketing and program awareness efforts to make its services known to the faculty and students.
  - Counseling has initiated stronger support systems for noncredit ESL students. It has designated a bilingual counselor, provided a bilingual education advisor, offered a First Semester Workshop in Spanish (spring 2016), and developed a new ESL Student Education Plan.
  
- Ideas Percolating, Undetermined Implementation Date
  - The counseling unit is discussing ways to embed counselors in at least some of the academic divisions to work specifically with students and faculty in those disciplines and to become more aware of specific academic division concerns and needs.
  - Counseling and matriculation intends to:
    - offer online interactive counseling sessions to provide remote site student access,
    - develop upgrades in the online orientation, and
    - upgrade probation and dismissal presentations and workshops.
  - The CalWORKS office is considering a peer-to-peer mentoring and study group program and implementing a permanent system to allow staff to continuously recognize and reward student accomplishments such as earning a high GPA or partaking in community service.
  - The offices of CalWORKS, Students with Disabilities, and EOP&S have started to provide paperless services, and they plan to continue increasing paperless management, and web-based delivery service in the future.

#### *Facilities Implications*

The current student services building cannot adequately house all of the student services programs. Counseling staff identified a need for additional office space for clerical support staff and counselors to meet the mandates from the redesigned matriculation program. The CalWORKS Office anticipated a need for additional space (reception and waiting areas, counselor offices, a larger computer laboratory, a general meeting room, and an area for student study and/or a lounge to promote informal gathering and

interaction among program participants). The Office for Students with Disabilities is currently in a modular building but has been part of the planning discussions for a new student services building. The present test-proctoring center cannot accommodate all of the students at peak times (mid-terms and finals). Additional space is needed for that service. The EOP&S Office expressed an interest in a dedicated study room/lounge with multiple electrical outlets for mobile devices owned by students in the program.

#### *Technology Implications*

Counseling has indicated that the technology infrastructure will need to be expanded to accommodate newly mandated student support services. Examples include:

1. increased cable drops and access points in the student services building so that a call center for student contact could be installed;
2. addition of computer lab classroom(s) in which counselors may conduct education planning, first semester transition, and transfer and probation workshops with students; and
3. software that will increase efficiency and security for storing and sharing student documents, records, performance data and service access history between student services offices and personnel.

#### *Student Services Division- Enrollment Services*

- Curriculum or Services Started, Recently Approved or Modified
  - The College requested to be a pilot for the statewide Common Assessment Initiative (CAI) and an electronic education plan is being developed.
  - Admissions and Records implemented an online application.
  - eTranscripts will be available to students starting in March 2016.
- Ideas Percolating, Undetermined Implementation Date
  - The Enrollment Services staff has been investigating third-party software applications that would help them reduce paper processing, store document images, and provide easy access to student data.
  - The transcripts staff has been looking into e-transcripts software.

#### *Facilities Implications*

More space and privacy per employee are needed in the office areas of Enrollment Services. The Financial Aid office moved to less paper a few years ago when the Free Application for Federal Student Aid (FAFSA) went on line. Financial Aid envisions future office space that is adjacent to a computer laboratory where staff can be available to help students and office operational hours are the same as the laboratory open hours. Having that adjacency is a good model for all of the units.

#### *Technology Implications*

The Enrollment Services staff anticipates greater use of technology to provide web-based self-service to students.

*Student Services Division- Student Life*

- Curriculum or Services Started, Recently Approved or Modified
  - The S.T.A.R. mentoring program was launched in fall 2015
  
- Ideas Percolating, Undetermined Implementation Date
  - Several units in Student Life have been exploring the viability of the On Base software application to help them with student documents and make operations more efficient.
  - The First-Year Experience and AVID for Higher Education programs (Bridge to Success Grant), which are part of the Student Activities unit, will be expanded in the future.
  - Student Activities plans to increase outreach efforts to elementary and middle schools in response to requests from those school leaders.
  - The Student Equity unit is planning to use new state money to support interventions designed to close equity achievement gaps. Examples include providing bus vouchers, funding extended learning center hours, supporting the Umoja and Puente learning communities, and providing childcare vouchers.
  - The Job Placement Center anticipates needing to find ways (role playing, work experience, internships, etc.) to assist the millennial students to improve their work ethic, communications skills, and sense of dedication.
  - Student Life would like the College to establish an advocate for students with mental health problems.

*Facilities Implications*

The Welcome Center/Outreach programs need additional space such as offices, an AVID Center area, a large multi-purpose area for events/activities, general materials storage, and private space for confidential peer mentoring sessions. The allocated area currently offers only three workstations for permanent employees and two for student workers. There are 14 student workers and three permanent employees with two additional positions temporarily vacant.

The Job Placement Office has expressed a need for additional space for student workers, a private meeting space for staff, a larger computer area to hold 10-15 computers, a meeting room, and generally quieter areas. The office also needs a conference room and a space to prepare students for campus events.

The Student Equity program is seeking space for the office staff of six permanent employees and six student workers. The program leadership also recognizes the need for a large multi-purpose room in which to host events with intense student activity and movement.

*Technology Implications*

The Student Equity program expressed a need for a tracking system to monitor the success of their intervention projects. The program would like to locate a software product that could help them manage the logistics of an extensive book loan program.

Student Activities would like to have software products to help them manage student clubs, batch download data from SEVIS, efficiently sign students in at activities, track student participation, and help evaluate the impact of that participation on student success.

### *Palmdale Center*

- Services or Curriculum Started, Recently Approved or Modified
  - Student support services have been expanded in recent years and additional expansion of service days will be expanded in the new Center. Cashier services will be available for the first time when the new Center location is opened.
  - The successful STEM summer bridge program, which is now limited to 40 students, will have more openings in the new Center location.
  - The partnership with Aerospace Academy, an Antelope Valley Union High School District high school, will have more places available for high school students who are dual enrolled with the College.
  - The intensive summer bridge program- STEM Science Academy for high school students will be able to accommodate more enrollments once the new Center location is opened.
  - A physical place for a STEM Center will be included in the new Center location property development.
- Ideas Percolating, Undetermined Implementation Date
  - In general, the curriculum offerings that have been offered in the past will continue into the future at the new Center, but some disciplines will see increases.
  - Projected offerings contemplate the following increases above what has been offered in the past.
    - Administration of Justice- slight increase in sections/term
    - Child and Family Education- increase in sections/term
    - ESL- slight increase in sections/term
    - Spanish- slight increase in sections/term
    - Sciences- increase in sections/term to use the new web laboratory
    - Deaf Studies- slight increase in sections/term
    - Math- significant increase in sections/term
  - Long-term the possibility of offering a second Associate Degree program, Liberal Arts option 1 with a math emphasis, will be explored. This program is designed for students who aspire to enter the teaching profession.
  - No programs will be moved from the Lancaster main campus to the new Palmdale Center.

### *Facilities Implications*

Within five years the College plans to provide students with a comprehensive education experience at the Palmdale Center. The Center has outgrown its current site, which is

shared with two other governmental agencies. The Center's operations began at the present site in 2007 and will move to a new location in Palmdale and open in spring 2017.

A science wet-lab is not currently available at the Center, but will be constructed in the new location. The new Center will have 7 *more* classrooms compared to the current site. The current Center provides seating for 325 while the new Center will provide 625 seats in lecture classrooms because each lecture room is slightly larger than is the case at the present Center location. A Child and Family Education demonstration classroom is planned for the new Center that is not currently available at the existing site.

#### *Technology Implications*

The reading courses will be provided a unique room in the new Center. That room will have computers that function as a reading laboratory, but, they will fold down into the desk area to support traditional lecture instruction. The dual functioning desk will allow the room to be utilized by a variety of courses. Space for a multipurpose room and a conference room, both with distance education equipment, will be created in the new Center.

### **E. Opportunities for New Initiatives, Improvement or Expansion**

Several general areas of opportunity are available to the College at this point in time (academic year 2015-16).

#### *Senate Bills 1440/440*

The 2010 enactment of the Student Transfer Achievement Reform (STAR) Act, aka SB 1440, provides the California community colleges with an opportunity to adjust some of the transfer-oriented programs that had been offered and to introduce new ones. The legislation requires a community college district to grant an Associate Degree for Transfer (AD-T) to a student in his/her field of study once the student has met degree and transfer requirements for a particular major. Once the transfer associate degree is earned (awarded), the student is eligible to transfer with junior standing into a local California State University (CSU) campus. Students will be given priority when applying to a particular program that is similar to his/her community college field of study. The bill prohibits a community college district or campus from adding local course requirements in addition to requirements of the STAR Act, and prohibits the CSU from requiring transferring students to repeat courses similar to those taken at the community college that counted toward their associate degree for transfer.

The statewide strategy to implement the STAR Act is to develop transfer-model curriculums (TMC) through inter-segmental faculty dialogue using the structure of the course identification numbering system (C-ID) so that statewide common course descriptions will be used as building blocks. The initial focus of the project was on the most popular transfer majors within the CSU. The goal is to reach agreements on a model curriculum that all community colleges will adopt for each particular major.

A subsequent amendment in 2013 (SB 440) required community colleges, by the start of the 2015-16 academic year, to create before the start of the 2013-14 academic year an associate degree for transfer in every major offered by the college that has an approved transfer model curriculum. Furthermore, the community college system is required to create an associate degree for transfer in specified *areas of emphasis* before the start of the 2016-17 academic year. Two area of emphasis, Global Studies and Social Justice Studies, TMCs were added in fall 2015.

Three additional model curricula have been created to promote a greater degree of standardization within community college Associate Degrees where the discipline does not fit the 60 lower-division units plus 60 upper-division units structure of the STAR Act. These *are not* TMCs within the SB1440/440 framework. They are in the fields of: (1) Engineering; (2) Information Technology; and (3) Nursing.<sup>7</sup>

As of spring 2016, thirty-six model curriculums had been approved that covered the CSU majors selected by roughly 80 percent of the community college transfer students. Throughout the community college system, by 31 March 31 2016, response from individual colleges ranged from only 5 AD-Ts (Palo Verde College) up to 28 AD-Ts (Sierra College). The results indicated that 20,600 community college students earned the new AD-T in 2014-15.<sup>8</sup> Some 7,000 students were accepted at a CSU, an acceptance count that was up from only 450 in 2011-12.<sup>9</sup> Antelope Valley College is among the leading community colleges with the number of AD-T programs of study established. *However, attention to the ongoing enrollment counts and costs to support the twenty-two established AD-T programs of study and the new programs being developed will be essential.*

The SB1440 legislation is a major policy shift for California higher education as it seeks to finally provide a cleaner and clearer path for easier transfer from the community colleges to the CSU where most students transfer. It eliminates the campus-by-campus and major-by-major transfer requirements and represents an unparalleled opportunity for the community colleges to facilitate the transfer process.

The University of California (UC) has also taken steps to simplify the process for transfer students, as it has articulated specific pathways for transfer into its 21 most popular majors. UC identified pathways that are closely aligned with the AD-Ts established between the community colleges and the CSU system. In addition, the UC has pledged to meet the goal of a two-to-one ratio of incoming freshmen to transfer students by 2017-18.<sup>1011</sup>

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<sup>7</sup> For additional information see <https://c-id.net/degreereview.html>

<sup>8</sup> California Community College Chancellor's Office. *Press Release*. December 10, 2015.

<sup>9</sup> Carl Lariveral. "Easier Path From Community College to Cal State, Report Says," *Los Angeles Times*. February 2, 2015.

<sup>10</sup> Department of Finance. *Higher Education Highlights to the May 2015-16 Revise Budget Proposals*

<sup>11</sup> University of California Transfer Information. Retrieved April 29, 2016 from <http://admission.universityofcalifornia.edu/transfer/preparation-paths/index.html>

*Assembly Bill 86- Assembly Bill 104 Block Grant*

The Legislature provided the community college system with an opportunity to serve new students and advance the interests of the State. The May 2015 revision of the Governor's proposed 2015-16 budget included a \$500 million to establish an Adult Education Block Grant program that provides funds to school districts and community colleges. Of that total \$350 million is earmarked for adult schools to maintain their level of effort in providing services while \$150 million is set aside for consortia work. The AB 86 program seeks to strengthen coordination of adult education services among adult schools, community colleges, local workforce investment boards, libraries, social service agencies, public safety agencies, etc. by reducing redundancy and providing the services to adult learners more effectively.

Regional consortia proposed transparent governance structures that were jointly approved by the Superintendent of Public Instruction and by the Chancellor of the Community College System. The consortia will be required to engage in robust planning at least once every three years for which funding certainty has been assured with the language in the May revised 2015-16 Budget proposals. The Superintendent and Chancellor developed a plan to distribute Workforce Innovation and Opportunity Act (WIOA) federal Title II and Perkins funding using the consortia structure in future years.

The College has taken advantage of this legislation and funding to provide a life skills education program to incarcerated individuals as a precursor to a pathway program to an Associate Degree in business. The College also plans to grow a new noncredit ESL curriculum and evaluate ways to incorporate career and technical education classes with the ESL instruction. The College has proposed a noncredit ESL curriculum as a Career Development/College Preparation certificate that would provide the students with a tangible acknowledgement of their accomplishments and make the attendance hours eligible for a higher rate of apportionment compensation. *The College may want to consider a similar curriculum design for GED preparation.*

The Adult Education Plan notes that a number of potential students are not being served by the ESL instruction due to distance, transportation, or childcare barriers. As noted in the external scan of this Plan those potential students are concentrated in a limited number of zip codes, but primarily in the Palmdale area. *Continued careful class schedule planning and marketing will be needed as the College endeavors to serve this population.*

The Antelope Valley Regional Adult Education Consortium Update Plan notes that regional offerings of basic computer technology, professional and interview skills, and general technology instruction for seniors seeking to enter the workforce is not adequate for the level of demand. *This may be a service area for the College to consider on a space available basis once the needs of credit instruction have been met.*

The Consortium found short-term career and technical education programs to be the top priority in the region. The adult schools have added some programs and the College increased its offerings through corporate and community education. Adults need classes



in workplace readiness skills such as communication (reading, speaking, listening and writing), collaboration, work ethic, time management, phone etiquette and message-taking skills, basic tool usage, and measurements. The region could use more offerings in manufacturing, energy, water treatment and distribution, retail, service occupations and construction. Other fields of high employment opportunity in demand include Personal Care Assistant, Home Health Aides or Certified Nursing Assistants, and automotive technicians.<sup>12</sup> *This may be an opportunity for the College to consider for continued expansion.*

#### *California Online Education Initiative (OEI)*

The third general opportunity is the OEI project launched in 2013 that seeks to re-invigorate online instruction within the California community college system by addressing some of the known shortcomings in distance learning. The Initiative has the Governor's backing and a \$56.9 million dollar budget over 55 months.

The 27-member steering committee includes representatives from a variety of constituencies that have been organized into workgroups to address: (1) professional development; (2) consortium operations; (3) student support services; (4) a common course management system; (5) basic skills; and (6) academic affairs. Twenty-four pilot colleges have agreed to test student readiness solutions; tutoring support strategies; and the use of the common course management system. With the grant funding the OEI promises to provide colleges with incentives to participate. OEI has offered no or low cost tools such as a course management system, course design resources, a re-designed California Virtual Campus website and catalog, and professional development for faculty. Future students are promised online learning readiness materials, tutoring and basic skills support, counseling/advising, and streamlined access.

Participation in the OEI is voluntary on the part of the colleges, faculty, and students. One of the most promising aspects of the OEI is the Exchange. It is often challenging for colleges to ensure that all students have access to the courses they need at the times that best fit their busy schedules. The goal of the Exchange is to facilitate progress toward completion by providing access to courses across colleges. Students enrolled at colleges in the Exchange will be able to seamlessly register for Exchange courses, often those with high-demand or are difficult-to-fill. To ensure that course credits are recognized by a student's home college, all participating colleges will become members of the OEI Consortium. Membership will require the college to align business processes to make registration seamless, host technology-based mechanisms to carry out those processes, sponsor courses designed to a set of exemplary online education standards, recruit faculty who are committed to excellence in online learning and teaching strategies, and offer courses students need to complete their educational goals. The vision for the Exchange has been dubbed the "Herculean" task of the OEI as it may be the most complex work undertaken in the overall effort, but it portends great dividends for the students.

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<sup>12</sup> Antelope Valley Regional Adult Education Consortium. *AB104 Adult Education Block Grant Three-Year Consortia Plan Update from AB86 final Plan*. November 12, 2015.

As noted in the internal scan portion of this Plan, the College has been an active participant in online instruction. Online instruction holds a promise to reach students outside the region as well as those who live in the service area but who cannot come to the campus. It also provides an option for students at the institution who were unable to enroll in a class they need in order to progress through their chosen program of study. It is clearly a means to reach a broader audience. The College recorded some online instruction in fall 2002 (33.59 FTES) but it represented only 0.92% of all FTES that year. Over the period of fall terms 2010 to 2015 the volume of FTES attributed to online instruction steadily grew from 312.87 FTES then fell off to 297.96 FTES in 2015. From fall 2002 to 2015 online instruction represented, on average, 4.7% of FTES at the College. From the earliest year on record the volume of FTES generated by online instruction compared to the total FTES *statewide* grew from .03% (130.76 FTES) to 9.5% (49,582.43 FTES) in fall 2015.

Over the years a great deal has been learned about the challenges to effective learning through an online environment. The OEI appears to be offering solutions to those known challenges.<sup>13</sup> The College has prudently participated as a pilot school in the student portion of this initiative. *Therefore, the College is encouraged to explore the benefits of fuller participation in the OEI initiative and to expand the use of this method of instruction through both classes offered entirely online and those offered in a hybrid/blended format with some weekly face-to-face instruction.*

#### *Moving Students Through Basic Skills*

The instructional strategies to address this topic have taken on multiple forms among community colleges. In part, it arose because the well-intended designs of basic skills curriculum sequences have unintended consequences by having exit points that lead many students to get discouraged and leave college.<sup>14</sup> Large scale research studies outside and within California have demonstrated that the more levels of developmental courses a student has to complete, the less likely the student is to ever complete college-level courses in English and Math.<sup>15</sup>

Other reasons for the increasing popularity of new basic skills strategies emerged from national research that raised questions about the efficacy of making placement decisions based primarily upon the results from a single examination experience.<sup>16</sup> Still other

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<sup>13</sup> Hans Johnson. et. al. *Successful Online Courses in California's community Colleges*. Public Policy Institute of California. June 2015

<sup>14</sup> Juan Calcagno and Bridget Long. *The Impact of Postsecondary Remediation Using a Regression Discontinuity Approach*. National Center for Postsecondary Research, April 2008; Thomas Bailey, Dong Jeong, Sung-Woo Cho. *Referral, Enrollment, and Completion in Developmental Education Sequences in Community Colleges*. Community College Research Center, Teachers College, Columbia University. Working Paper # 15, 2009.

<sup>15</sup> Nikki Edgecombe. *Accelerating the Achievement of Developmental Education Students*. Community College Research Center, Teacher's College Columbia University. Working Paper #30, 2011; Peter Bahr, et. al. *Course-Taking Patterns, Policies, and Practices in Developmental Education in the California Community Colleges*. Ed Source. June 2010.

<sup>16</sup> Judith Scott-Clayton. *Do High Stakes Placement Exams Predict College Success?* Community College Research Center, Teacher's College Columbia University. Working Paper #41, 2012; Olga Rodriguez, et.

national research has pointed to the ability of high school transcript data to predict success in college.<sup>17</sup> These research efforts opened a “new door” for basic skills initiatives.

The basic skills strategies have been given various definitions and adopted different labels or descriptors. For purposes of this discussion five definitions/strategies have been identified as follows:

1. Compressing the pace of instruction by teaching the same course content over a shorter period of time.
2. Changing placement policies by adjusting placement exam cut scores and using more robust multiple measures data.
3. Implementing co-requisite models.
4. Embedding basic skills instruction into other courses.
5. Redesigning remedial courses.

Compressing the pace of instruction as a strategy is perhaps inspired by the experience of faculty who teach a summer session of the same course they offer during the fall or spring term. Retention and success are thought to be higher during the summer session experience. But, is that because students attending during the summer are better prepared and more motivated or are the results due to the shorter period of time and the more intense instruction and contact with the subject matter? This scheduling strategy during a primary term arranges two levels of remedial curriculum in the discipline so that one course in the sequence follows the other, each using half of the weeks in the primary term. Typically the sequenced courses are taught on the same day and hour pattern with the same instructor. In some cases students are automatically enrolled in both courses to guarantee a place in the classes for the entire term of instruction.

Changing placement policies broadens access to transfer-level courses and makes outcomes equitable for multiple subgroups of students. National research estimated that 64% of entering students could succeed in college, transfer-level English if allowed to enroll directly while currently only 19% were eligible under existing practices. Half of entering students could succeed in college math if allowed to enroll directly while only 25% were eligible under existing practices.<sup>18</sup> A California Research Project found that 72% of community college students could be placed into college English using the overall high school GPA and English course GPA data.<sup>19</sup> For at least two pioneering California community colleges (Butte and Long Beach) the access to college English was doubled at Butte and quadrupled at Long Beach with success rates that remained steady

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al. *Remedial Placement Testing in Community Colleges*. Community College Research Center, Teachers College, Columbia University. Working Paper # 73, 2014.

<sup>17</sup> Clive Belfield and Peter Crosta. *Predicting Success in College: The Importance of Placement Tests and High School Transcripts*. Community College Research Center, Teacher’s College Columbia University. Working Paper #42, 2012.

<sup>18</sup> Judith Scott-Clayton. *Do High Stakes Placement Exams Predict College Success?* Community College Research Center, Teacher’s College Columbia University. Working Paper #41, 2012.

<sup>19</sup> Craig Hayward, John Hetts, Terrance Willett, et. al. *Using Decision Trees to Predict Course Success in the Multiple Measures Assessment Project*. Presentation at the Research and Planning Group Annual Conference, April 2015.

and equity gaps narrowed.<sup>20</sup> In the Virginia Community College system, completion of college-level math tripled after implementation of a pathways approach to placement.<sup>21</sup>

The strategy of using co-requisites allows students characterized as being “below transfer level” to enroll in a transfer-level course that is in a co-requisite relationship with a support class commonly taught by the same instructor. The positive outcomes in multiple states have been impressive.<sup>22</sup> Using a controlled experiment design the City University of New York found that the majority of students passed college statistics with supplemental instruction and the pass rate was nearly 29% higher than in the control group students who initially enrolled in elementary algebra.<sup>23</sup> Four North Carolina community colleges found that completion for college English was 1.6 to 2.3 times higher than in traditional remediation and equity gaps narrowed or disappeared completely.<sup>24</sup>

Some institutions have successfully pursued a strategy of embedding basic skills instruction into discipline courses. The common theme to these approaches is the use of concrete applications in a specific context that is of interest to the students.<sup>25</sup> The teaching process is built on the recognition that some students learn more effectively when they are taught in a hands-on, real-world context rather than in an abstract manner. The currently popular reading apprenticeship initiative is perhaps another example of this embedded approach.

Redesigning remedial courses is a basic skills strategy that seeks to better align English and math sequences with transfer-level curriculum. Among the first 16 California community colleges offering redesigned remediation, a 2014 evaluation of the initiative observed that throughout the California community college system only 7% of the students beginning at three levels below transfer-level successfully completed a transferable math course within three years. The comparable number for English composition is 19%. In contrast, all 16 of the experimenting colleges reduced the

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<sup>20</sup> Leslie Henson and Kati Hern. *Let Them In*. Research and Planning Group Perspectives. November/December 2014; Long Beach City College. *Promising Pathways*. 2014. Retrieved from <http://www.lbcc.edu/promisepathways>

<sup>21</sup> Olga Rodriguez and Nikki Edgecombe. *Early Findings From Statewide Developmental Education Reform in Virginia and Florida*. Presentation at the League for Innovation annual conference, March 9, 2015; Hoori Kalamakarian, Julia Raufman, and Nikki Edgecombe. *Statewide Developmental Education Reform: Early Implementation in Virginia and North Carolina*. Community College Research Center, Teacher’s College Columbia University. May 2015.

<sup>22</sup> Complete College America. *Corequisite Remediation: Spanning the Completion Divide*. Spring 2016; Iris Palmer. *How to Fix Remediation at Scale- Colorado Example*. New America. March 2016; *Is Corequisite Remediation Cost Effective- Early Findings from Tennessee*. Community College Research Center, Teacher’s College Columbia University. Research Brief #62, 2016.

<sup>23</sup> Alexandra Logue et. al. *Elementary Algebra or Statistics*. Paper delivered at the American Educational Research Association Conference. April 19, 2015.

<sup>24</sup> Dawn Coleman. *Replicating the Accelerated Learning Program*. Center for Applied Research. 2015.

<sup>25</sup> C. Mazzeo. *Supporting Student Success at California Community Colleges*. Career Ladders Project. 2008. Dolores Perin and Rachel Hare. *A Contextualized Reading-Writing Intervention for Community College Students*. Community College Research Center, Teacher’s College Columbia University. May 2011. Elaine Baker, Laura Hope, Kelley Karandjeff. *Contextualized Teaching & Learning: A Faculty Primer*. Research and Planning Group. 2009.

students' time in remediation by at least one semester without making any changes to transferable courses. The study found that students' odds of completing a transferable math course were 4.5 times greater in the experimental pathway than for students in traditional math remediation course and English composition courses completion rates were at least 1.5 times greater and 2.3 times greater in some of the implementation models than for students in traditional English composition remediation.

These experimental designs were found to work for students of all backgrounds and at all placement levels, but, implementation strategies did impact the final results.<sup>26</sup> The Carnegie Foundation for the Advancement of Teaching has sponsored a national program, Statway, to improve the completion of transfer-level math. Evaluation of that program concluded that, among the 26 pilot colleges, completion rates more than tripled in half the time (49% in one year vs. 15% in two years).<sup>27</sup> This math strategy, sometimes described as Statway, is now fully accepted by the University of California and the California State University systems.<sup>28</sup>

A California Basic Skills Project (CAP) has been in place since 2010-11 as a response to the basic skills performance challenge and was a curricular design effort at some California community colleges years before the project formally began. The CAP seeks to promote curricular redesign to reduce the sequence length and eliminate “exit points” in the basic skills educational experience. It also promotes a reconsideration of curricular content to focus on what is taught and how it is taught with the guiding question of what students truly need to succeed in college English or math. As of June 2011, more than 80 colleges had participated in the CAP professional development activities.

The Mathematics faculty members have crafted a dual track for AVC students. One that leads through algebra to calculus for those students interested in STEM or other fields of study that require calculus. A second pathway provides some instruction in algebra but leads to a basic statistics course for those students interested in fields of study that do not require calculus. These dual pathways were launched in fall 2015. The Mathematics Department basic skills experiment, Math 099/001, using EducoSoft self-paced software and a modularization curriculum design has had a profound and positive impact.

*Given the reported positive outcomes from the California and national research, some pilot project effort in English composition may be a worthy effort for the College to undertake.*

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<sup>26</sup> Craig Hayward and Terrence Willett. *Curricular Redesign and Gatekeeper Completion: A Multi-College Evaluation of the California Acceleration Project*. April 2014

<sup>27</sup> Nicole Sowers and Hiroyuki Yamada. *Pathways Impact Report*. Carnegie Foundation for the Advancement of Teaching. 2015.

<sup>28</sup> UC/CSU Path Cleared for Statistics Pathways, October 20, 2015. Retrieved from <http://cap.3csn.org/2015/10/20/uccsu-path-cleared-for-statistics-pathways/>. See also Office of the Chancellor. California State University. *Statistics Pathways in CSU Quantitative Reasoning*. October 20, 2015 and University of California. *Special Regulations for Courses in Specific Subject Areas*. Retrieved October 20, 2015 from <http://ucop.edu/transfer-articulation/transferable-course-agreements/tca-policy/regulations-by-subject-area.html#s>

### *Dual Enrollment- AB288*

The most recent legislation to promote collaboration, AB 288 took effect in January 2016, authorizes the governing board of a community college district to enter into a College and Career Access pathways (CCAP) partnership with the governing board of a school district. The partnerships offer or expand dual enrollment opportunities for students who may not already be college-bound or are from groups underrepresented in higher education. The goal is to develop a seamless pathway from high school to community college for career-technical education or preparation for transfer, improving high school graduation rates, or helping high school students achieve college and career readiness. The following are the highlights of the legislation:

- Community colleges can assign priority enrollment and registration to high school students in a CCAP with no fees to pay;
- Community college courses during the regular high school day can be restricted to high school students and do not have to meet the normal open enrollment standard;
- Courses with no open seats on campus cannot be offered at high schools through the CCAP;
- Basic skills math and English can be offered through CCAP, but only for students who are not at grade level in that subject; and
- Community colleges can claim FTES if the high school student is qualified for full high school apportionment without using hours of the college course.

The College has hosted a very successful and popular Early College High School effort, known as Students on the Academic Rise (SOAR), which facilitates dual enrollment with instruction actually conducted at AVC. With an emphasis on mathematics, science, and engineering this dual enrollment opportunity is for well-prepared and highly-motivated high school students.

The AB288 legislation opens the door for the College to explore creative ways to better prepare prospective AVC students while they are still in high school. The AVC math department has devised a summer and school year zero-period offering instructional package, senior math assessment placement (SMAP), to improve high school student placement scores for those students who are performing below grade level or who need to brush up on math skills. The Rosamond High School has implemented the ERWC curriculum to help below grade level students strengthen their composition skills while still in high school. *The College may wish to collaborate with the public schools in considering additional interventions in both math and English to cultivate a pool of prospective students who are better prepared for collegiate instruction.*

### *Shared Facilities*

The College has unique facilities arrangements with CSU Bakersfield, the Antelope Valley Joint Union High School District, and CSU Long Beach, which have been forged to support academic instructional programs. The College may want to consider shared

locations such as a manufacturing center to provide job training in the Antelope Valley area.

#### *Student Services*

The student services units have aggressively pursued the use of technology to

- reduce paperwork and retention of physical documents where possible,
- curtail unnecessary trips to campus, and
- maximize self-service options.

The leadership in student service would like to eliminate redundant collection of basic data about students and make that easily accessible at computer monitors for all staff in the various units. These measures have been pursued and the vision is to increase more meaningful face-to-face contacts that will provide student support and encourage student development. *The College may want to purposely explore ways to further advance this agenda.*

#### *Academic Affairs*

Advice from community leaders has encouraged the instructional leadership to continue efforts to grow programs in the:

- trades, particularly in aerospace and advanced manufacturing;
- science, technology, engineering, and mathematics (STEM) disciplines; and
- health care professions.

Faculty members in engineering are currently listening to advice from their industry advisory committee and exploring ways to re-tool the engineering technology program. The redesigned program will become more applied engineering and potentially responsive to the needs of manufacturing firms in the Antelope Valley area.

There is a commitment to maintain the established AD-Ts where feasible and to package those existing programs so that students are more successful in a shorter period of time. As efforts for a two-year schedule and extensive, coordinated student support are being designed for cohorts of students who have elected to pursue an AS-T or AA-T degree pathway, the AVC2CSU initiative is the prime example of this commitment.

A current STEM grant has produced a STEM pathway and outreach to prospective students. A new STEM grant proposal is being developed to further advance educational opportunities in these disciplines.

The College has also recently expanded community and contract education services.

Faculty members are actively exploring new CTE programs in Business Information Worker and Medical Billing and Coding.

*Given the range of advanced manufacturing firms in Antelope Valley that have expressed an interest in additional hiring in the near future, the College may want to explore the*

*possibilities of some common instructional package that would provide graduates with a skill set that would be attractive to a range of local prospective employers.*

Draft



Mart; analysis by Cambridge West Partnership, LLC

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