

Coastline Community College

8/23/01

An Environmental Scan

This is the initial report on an environment scan for trends that may impact Coastline College. The report summarizes trends at the county, state and national level that may impact the college through 2007. It is hoped that by reviewing these trends, the college will be in a better position to plan for its future.

The External Scan 2001 includes these six sections:

- I. Demographic Trends – General Population, School-Age Population
- II. High School Graduate Trends for the District
- III. Students' Readiness for College
- IV. Economic Development, Occupational, and Workforce Trends
- V. Trends in Higher Education, Statewide and National
- VI. Economic, Political and Legal Trends That Could Impact Community Colleges

The Internal Scan includes these two sections:

- I. Trends Identified in Coastline's Program Review Process
- II. Trends Noticed in Coastline's Students

External Scan

I. Demographic Trends

California and OC Population Trends (Source - Kangas & Budros, 2000; Legislative Analyst's Office, 2000):

Table 1. Population growth projections for Orange County and California.

	July 2000	July 2005	July 2010	July 2015
Orange County	2,893,100	3,099,700	3,266,700	3,384,300
Percent growth over July 2000	--	7.1%	11.3%	17.0%
California	34,480,300	37,473,500	40,262,400	42,711,200
Percent growth over July 2000	--	8.7%	16.8%	23.9

- California is adding a half-million people annually; the state is growing at a rate of 1.6 percent annually. (Source – LAO's Cal Facts)
- Californians' average age is increasing, as baby boomers enter their 50s and continue to cause rapid growth of the 45-64 age group. (Source – LAO's Cal Facts)
- The projected college-age population growth is above average, portending an upsurge in college enrollments. (Source – LAO's Cal Facts)
- The Hispanic and Asian populations are growing most rapidly. Their average annual growth rate of nearly 3 percent is seven times faster than that for whites. (Source – LAO's Cal Facts)
- About half of foreign-born Californians are Hispanic, while another third are Asian. (Source – LAO's Cal Facts)
- By 2025, the Latino population will comprise about 40% of the state's population and the Asian American population will be about 15%. (Source – "Immigration and Immigrant Integration in California: Seeking a New Consensus," by Manuel Garcia y Griego and Philip Martin, California Policy Research Center Study, Oct. 2000.)
- Hispanics make up 42% of California's six million K-12 students, and Spanish speakers represent 80% of the limited English proficiency students. (Source – "Immigration and Immigrant Integration in California: Seeking a New Consensus," by Manuel Garcia y Griego and Philip Martin, California Policy Research Center Study, Oct. 2000.)
- California's college students generally are taking longer to graduate than in the past. The demand for higher education is expected to increase by nearly 500,000 by 2005, a figure that appears to be beyond the capacity of our higher education institutions to accommodate through traditional means. (Source – Kangas, J. (2000) California's Population, Strategic Planning Trends, San Jose/Evergreen Community College District.)

- Population Growth for Selected Cities in Coastline’s Service Area (Source - Southern California Association of Governors; California Department of Finance, Demographic Research Unit):

Table 2. Population growth by selected cities – 1990-2000.

City	1990	2000	Delta 90-00	% Delta 90-00
Costa Mesa	96,357	108,724	12,367	12.8%
Fountain Valley	53,691	54,978	1,287	2.4%
Garden Grove	143,050	165,196	22,146	15.5%
Huntington Bch	181,519	11,014	8,075	4.4%
Newport Beach	66,643	70,032	3,389	5.1%
Seal Beach City	25,098	24,157	-941	-3.7%
Stanton	30,491	37,403	6,564	22.7%
Sunset Beach				
Westminster	78,118	88,207	10,089	12.9%
Total O.County	2,410,556	2,846,289	435,733	18.1%

- The average age for Hispanics in Orange County is 25; for whites, it is 40.
- OC businesses are responding to the growing Latino population. Arts officials around the county are talking about how to reach immigrants “locally, regionally, nationally.” The center is now advertising in Spanish-language publications around Orange County. The Anaheim Angels are featuring ads with the team’s Hispanic players on OCTA buses traveling through Hispanic areas. The OCTA provides free rides to Hispanics who want to attend an Angel game. Last week, the Angel’s marketing team conducted a series of focus groups comprised of Hispanics. Disneyland’s Web sites are now available in Spanish. Disney is advertising with Spanish-language commercials. (Source – OC Register, 8/8/01).
- More ethnic trends in OC – Vietnamese residents are leaving their traditional ethnic enclave in Westminster and buying larger homes in Fountain Valley and Huntington Beach. Many Chinese and Indian families are buying homes in Irvine. Most Hispanic homeowners still live in north Orange County, but many have left the Santa Ana area for more spacious homes and less-crowded school districts such as Tustin and Costa Mesa. The large majority of Orange County’s Hispanics are Mexicans, but Central Americans and South Americans have considerable populations in Orange County as well. (Source – OC Register, 8/8/01).
- Enrollment predictions for California Higher Education – The Department of Finance projects that the total headcount for enrollment at UC, CSU, and the community colleges in 2010 will be 620,000 higher than in the prior peak enrollment year of 1990. It represents an annual increase of 1.3% from 1990 to 2010. In comparison, enrollments grew an average of 4.9% per year in the three previous decades. Thus by historical standards, projected enrollment growth in the coming years will be *moderate and sustained*. (Source – Legislative Analyst’s Office, Dec. 2000)
- Californians of prime college-going ages (between 18 and 24) are attending UC, CSU, and the community colleges at historically high rates. This high participation rate is at or near historic highs for all ethnic groups. Participation rates among older adults (25 to 34 year olds) have steadily declined – primarily because a higher percentage of older adults today obtained college degrees when they were of prime college-going age. (Nearly twice as many 25 to 34 year olds today have degrees compared to 20 years ago.) (Source – CalFacts: Participation rate among college age population near all-time high. CA Legislative Analyst’s Office, Dec. 2000)

- Ethnic Trends for Selected Cities in Coastline’s Service Area (Source - Southern California Association of Governors; California Department of Finance, Demographic Research Unit):

Table 3. Ethnic distribution for selected cities from 2000 Census.

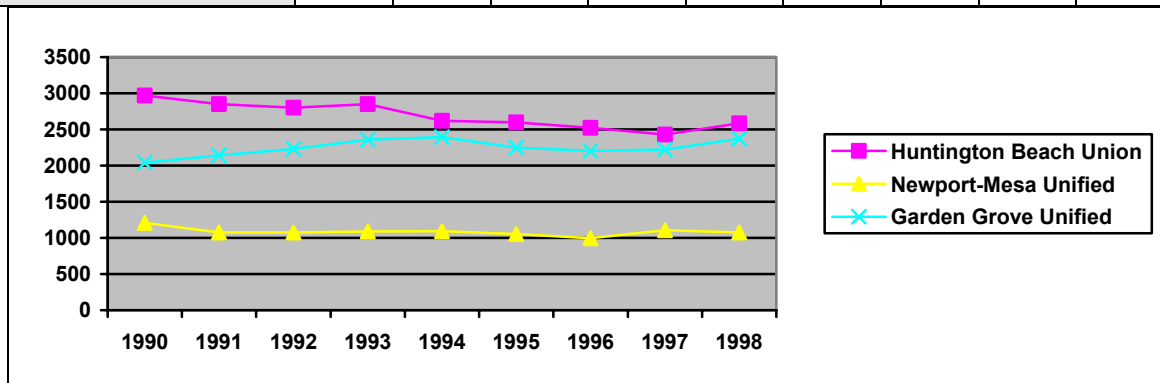
City	White	Hispanic	Black	AmInd	Asian	Pac Is	Other	2 or more
Buena Park	38.2	33.5	3.6	0.4	20.9	0.5	0.2	2.8
Costa Mesa	56.8	31.8	1.2	0.3	6.8	0.6	0.2	2.3
Fountain Valley	58.5	10.7	1.1	0.3	25.6	0.4	0.2	3.2
Garden Grove	32.5	32.5	1.1	0.3	30.8	0.6	0.1	2.1
Huntington Beach	71.8	14.7	0.7	0.4	9.3	0.2	0.2	2.7
Newport Beach	89.0	4.7	0.5	0.2	3.9	0.1	0.1	1.4
Stanton	30.2	48.9	1.9	0.4	15.3	0.9	0.2	2.3
Westminster	36.3	21.7	0.9	0.3	38.0	0.4	0.1	2.3

II. High School Graduate Trends for the District

- National Center for Educational Statistics is projecting a 22% increase of high school graduates in California between 1998-99 and 2009-10.
- About 23% of Coastline College’s students each fall are first-time freshmen (not a transfer from another college).
- Coast District High School Graduates (Source: OCC Atlas; Ed Data web site).

Orange County High School Graduates Within CCD District (1990-1998)

Within District	1990	1991	1992	1993	1994	1995	1996	1997	1998
Huntington Beach Union	2968	2851	2802	2850	2618	2598	2522	2427	2586
Newport-Mesa Unified	1208	1077	1076	1090	1093	1052	996	1104	1077
Garden Grove Unified	2040	2142	2229	2359	2393	2246	2203	2220	2373



- Graduates by ethnicity for Coast feeder districts – 1997-98 (Source - CBEDS website)

Ethnicity	HB Union HS District		% 97/98 Grads Eligible for UC-CSU
	Count	%	
American Indian	210	8.1%	47.0%
Asian	582	22.5%	63.9%
Pac Islander	21	0.8%	47.6%
Filipino	31	1.2%	54.8%
Hispanic	344	13.3%	18.9%
Afr American	26	1.0%	46.2%
White	1372	53.1%	50.4%
Multiple/No Res	0	0.0%	0.0%
Total	2586	100%	49.0%

Ethnicity	Newport-Mesa Unified		% 97/98 Grads Eligible for UC-CSU
	Count	%	
American Indian	1	0.1%	0%
Asian	62	5.8%	77.4%
Pac Islander	6	0.6%	33.3%
Filipino	11	1.0%	36.4%
Hispanic	222	20.6%	19.4%
Afr American	11	1.0%	0.0%
White	758	70.4%	53.3%
Multiple/No Res	6	0.6%	16.7%
Total	1077	100%	46.6%

Ethnicity	Garden Grove Unified District		% 97/98 Grads Eligible for UC-CSU
	Count	%	
American Indian	11	0.5%	9.1%
Asian	791	33.3%	36.0%
Pac Islander	22	0.9%	4.5%
Filipino	36	1.5%	19.4%
Hispanic	762	32.1%	5.8%
Afr American	34	1.4%	11.8%
White	717	30.2%	22.9%
Multiple/No Res	0	0.0%	0.0%
Total	2373	100%	21.3%

III. Students' Readiness for College

- California ranks 43rd in the country in terms of the percentage of adults who have graduated from high school. On the other hand, 32.9% of Orange County's adults have a Bachelor's Degree. (Source – San Francisco Chronicle, December 19, 2000.)
- Nationwide, only 42% of today's students leave high school with the necessary skills to begin college-level work. (Source: "Measuring Up 2000"; www.highereducation.org (National Center for Public Policy and Higher Education) "Under prepared Students" by Robert McCabe.
- Only 17% of California 8th graders scored at or above "proficient" in math on the national assessment exam. This figure compares to 33% of eight graders in the top states. (Source: "Measuring Up 2000"; www.highereducation.org (National Center for Public Policy and Higher Education) "Under prepared Students" by Robert McCabe.
- A recent national report gave California schools a "C-minus" in college preparation (33 states ranked higher). (Source: "Measuring Up 2000"; www.highereducation.org (National Center for Public Policy and Higher Education) "Under prepared Students" by Robert McCabe.
- When the English learners (ESL) in Orange County public schools are ranked by grade and ethnicity, Spanish-speaking children are by far the largest group, followed by Vietnamese. Shown below are 1999-00 data. When one examines the kindergarten to 6th grade "ethnic pipeline," the differences are even more pronounced. That is – the Spanish to Vietnamese ratio among OC kindergartners is nearly 14:1. (Source – CA Dept. of Ed, Demographics Unit, 7/17/01).

	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Spanish	7444	6651	8121	6304	4728	3478
Vietnamese	689	590	741	882	841	803
Korean	228	183	201	324	213	195

- Freshman admission criteria of the CSU and UC require applicants to complete nearly identical college preparatory curricula. Since 1994, public high schools have reported annually the proportion of graduates who complete the full set of university required courses with a "C" grade or better. By ethnic-racial group statewide, 55% of Asian graduates and 41% of White graduates completed the university-preparatory curricula, whereas only 26% of Black graduates, 22 % of Latino graduates, and 23% of Native American students did so. (Source – CPEC Factsheet.)
- Almost half of regularly admitted CSU students (freshmen) arrive unprepared in writing and mathematics. For the last two years, the unpreparedness rate in mathematics has fallen – dropping to 45% in fall 2000. Unpreparedness has remained relatively constant at UC. The Legislation Analyst's Office recommends more testing of proficiency levels, including having CSU and UC annually test and report on the proficiency of all CC transfer students. (Source – Budget Analysis: Improving Academic Preparation for Higher Education, LAO's Office, Feb. 8, 2001)
- UC/CSU eligibility for Orange County high school graduates has risen, largely attributable to increased eligibility for Asians and Whites; all other ethnicities did not see a similar trend in the past five years. Only one in six Hispanic students, who make up over 40% of total enrollment in Orange County, graduate with appropriate coursework to go to a state college. (Source – Comprehensive Economic Development Strategies (CEDS), 2001 Orange County Document)

IV. Economic Development, Occupational, and Workforce Trends

- The 10 fastest growing occupations in America, 1998-2008 – Numbers are in thousands of jobs. (Source - Bureau of Labor Statistics.)

	1998	2008	Percent Change
Computer engineers	299	622	108
Computer support specialists	429	869	102
Systems analysts	617	1194	94
Database administrators	87	155	77
Desktop publishing specialists	26	44	73
Paralegals and legal assistants	136	220	62
Personal care and home health aides	746	1179	58
Medical assistants	252	398	58
Social and human service assistants	268	410	53
Physician assistants	66	98	48

- For jobs in California requiring post-secondary training or an Associate’s degree:
 - The *fastest growing* 25 occupations in California (1998-2008) requiring post-secondary training or an Associate’s degree (see appendix 1)
 - The top 25 occupations with the *most openings* in California (1998-2008) (see appendix 1)
 - 25 occupations with the *largest employment* in California (see appendix 1)
 - The *25 top paying* occupations (see appendix 1) (Source – America’s CAREERINFONET <http://www.acinet.org/>)
- California jobs for college graduates (Source – D. R. Blake, PhD, Professor of Economics, CSU Northridge)
 - Most occupations that require a college degree will grow more quickly over the next 10 years in California than those that do not require a college degree.
- Major employers in Orange County (see appendix 2) (Source – CA EDD web site <http://www.des.calstate.edu/>)
- “Technology is changing rapidly and higher technology solutions are continually sought and adopted in the workplace. Demand for high technology products and services will grow with this trend, which will advantage the new and existing workers who are familiar with the new technologies and disadvantage the less adaptable and less skilled workers.” (Source CSU’s Dynamic Environmental Scan, 7/13/01)
- Aging of the baby boomers and emergence of the “baby boom echo” will produce two significant trends. There will be a growth in opportunities in health care and related occupations, and eventually in geriatric related fields. The baby boom echo will swell enrollments in educational and training programs, boost the demand for educators, trainers, and related professionals, and increase the number of new labor force entrants in the 16-24 age range. Most of the benefiting occupations will require a BA degree or more.” (Source CSU’s Dynamic Environmental Scan, 7/13/01)
- Growing need for teachers in California – The U.S. Department of Education projects that by 2008, elementary and secondary schools enrollment will have risen by 3% - by 1.6 million students – over 1998 totals with grades nine through 12 and schools in the West and South growing the most. And U.S. teachers are graying. The median age of U.S. teachers is mid-40s. Over 30,000 teaching spots open every year in California’s public schools. (Source – L.A. Times, 8/8/01)

- By 2011 nearly 300,000 positions in California's public schools will go unfilled (this includes administrators). School districts are beginning to look overseas to fill vacant slots. Besides the growing population, a major problem, particularly in urban schools, is the large number of recruits who become discouraged and leave after only of couple of years teaching. (Source - L.A. Times 8/15/01)
- Professional and technical occupations (virtually all of which require college degrees) will be the fastest growing occupations in California over the next decade. Growth trends are predicted for these areas: (Source CSU's Dynamic Environmental Scan, 7/13/01)
 - Computer, Mathematical, Operations Research are the fastest growing occupations in this group.
 - Teachers, Educators, and Librarians constitute the largest growing group of professional and technical workers.
 - Health related occupations are the next largest growth category.
 - Engineer, Architect, and Surveyor occupations will grow significantly.
 - Social Science, Recreation, and Religious occupations, including social workers and human service workers are expected to see a large growth (31% by 2006).
- 14% of California teachers are not fully qualified for the job. The 1996 decision to lower elementary class size together with soaring school enrollment has created a crisis in teaching. 40,000 K-12 teachers in California do not have credentials and are untrained in teaching or classroom management. The state is implementing several programs to address the problem, among them: The Teacher Recruitment Initiative Program; grant-funded incentives such as bonuses, higher pay, and house subsidies; Assumption Program of Loads for Education; and Governor's Teaching Fellowships. (Source – San Francisco Chronicle, 12-7-00).
- The Orange County Committee on Comprehensive Economic Development Strategies (CEDS) has a vision for the county: *An educated and trained workforce from diverse ethnic backgrounds who are equipped with the tools and skills required for the ever-changing job market of the twenty-first century.* The solution is to establish and/or strengthen linkages. An ideal situation for OC would have strong linkages from high school to both 2-year and 4-year college programs, as well as strong linkages for adults with no GED and workers in need of new training and the vocational and technical schools. Recommended strategies include:
 - Strengthen computer skills in the K-12 population, Community College students, welfare-to-work clients, and adults re-entering the workforce.
 - Increase the length and number of school days. The success of "Edison schools" verify the effectiveness of this strategy. (see www.edisonschools.com)
 - Increase funding to K-12 institutions, targeting predominately Hispanic schools.
 - Facilitate greater interaction between local businesses and high school students.
 - Through conferences, develop partnerships between business, education leaders, and students. More specifically, develop partnerships with businesses and the county's trade and vocational schools. (Source: Comprehensive Economic Development Strategies (CEDS) Document for Orange County, 2001)
 - Orange County is a dominant international force in technology, advanced manufacturing and communications. There has been transition from defense and aerospace jobs to telecommunications and computer software. About 30% of the county's fastest growing companies are high-tech. Ingram Micro, a computer products distributor, is the county's

number one public company, while Toshiba is the number one foreign owned company. But...the price of housing is the leading barrier to business expansion. A shortage of housing at affordable levels makes it more difficult for businesses, government and universities to recruit new employees, and exacerbates traffic congestion and air quality problems as workers commute longer distances in search of housing. In 2000 only 27% of households in Orange County could afford the median priced home (\$315,730). (Source: Comprehensive Economic Development Strategies (CEDS) Document for Orange County, 2001)

- Employment demand and workforce training trends identified by the Orange County Business Council (Source – Closing the Gaps, Employment Demand and Workforce Training in Orange County’s New Economy, Orange County Business Council, 2000):
 - Firms in many sectors now demand employees with and without experience, indicating a tight OC labor market.
 - Orange County has a diversified high-technology economy.
 - Most job growth in OC, and California, is projected to be in low-wage occupations.
 - An adequate wage in OC? Estimated income to support a family at a basic standards of living, two-parent family with two children: \$11.46 per hour (assumes two-bedroom apartment for a family of four without extras such as vacations or college savings). A single-parent family needs to earn almost as much as a two-parent family on an annual basis due to high cost of child care.
 - Several sectors with high percentage future job growth start at a low base pay leading to relatively high wages for experienced workers. High tech occupations show the highest differential in wages between experienced and non-experienced employees.
 - Given the high wage differential for high tech employees due to job experience, training opportunities that invest in preparing employees for occupations in this sector will demonstrate the highest return on investment.
 - The Council recommends forming innovative partnerships with industry, and targeting economic development efforts towards high-wage sectors.
 - Most local industry leaders report that Orange County’s No. 1 problem is the shortage of workers and the resultant high salaries for technical talent. Anecdotal reports of a significant skills gap between the students coming out of school today and the workers that businesses and industries need are printed almost daily in both local and national newspapers. The Orange County Workforce Investment Boards located in Anaheim and Santa Ana stated, “there exists a need to better link academic programs to the needs of local employers.” Better links are needed between the universities, community colleges, and K-12 educational system and the needs of local employers.
 - Irvine leads the high technology activity, followed by Santa Ana and Anaheim.
 - The most concentrated local high tech industries – microelectronics, advanced instruments, biomedical, and optoelectronics, also showed the strongest local employment growth relative to national trends.
 - The OCBC recommends checking the 10 fastest growing jobs in OC. These 10 occupations account for more job openings than do the other tables provided. The top five demand occupations by absolute growth for 1997-2004 are Managers, Sales, Guards, Janitors, and Landscaping/Grounds keeping.
 - Overall the number of job seekers exceeds the number of jobs available, but just barely, in Orange County. The most significant mismatch between jobs and job seekers is the shortage of seekers with a college degree (BA/BA). 46% of OC job growth will occur in occupations requiring only short or moderate on-the-job training. Potential areas of workforce oversupply include those occupations needing a master’s degree and those needing an AA degree. 20% of OC’s job openings will require new workers with vocational training, a community

college degree or long term, on-the-job training. 16% of the projected job growth will require a four-year degree, and 2% a graduate degree. The remaining 16% will require significant work experience and will not be available to first time employees.

- Projections are for slightly more job openings requiring a college degree than the supply of job seekers having a college degree. A more significant problem is a deficit of needed skills rather than a shortage of college grads. In other words, there may be too many liberal arts majors and not enough engineers.
- Workers in the high technology field tend to receive higher wages. Wage differences between experienced and non-experienced workers tend to be among the highest for high technology occupations. Due to the high location quotient of Orange County, the high growth and high wage differential due to experience, trainers should create internships that provide experience for prospective workers. OCBC’s focus group’s listed these clusters (see table below) as undergoing the most heavy recruitment (both local and outside OC. (Source – Closing the Gaps: Employment Demand and Workforce Training in Orange County’s New Economy. The Orange County Business Council, 2000)

Orange County Cluster	General Workforce Need
Microelectronics	Needs highly skilled labor pool of MS and PhD research engineers for R&D
Biomedical	Needs plentiful, diverse, trained and talented workers/labor pool for manufacturing operations
Advanced Instruments	Needs trained high-school graduates for manufacturing and production
Software	Big workforce need at all levels – 75%: BA in specific fields, 73%: MA, PhD
Design	Needs skilled labor pool at all levels, especially occupationally trained AA level workers

- Recruitment over the Internet is becoming the preferred method for finding high-tech employee applicants.
- The services, retail trade, and manufacturing sectors will account for 68% of Orange County job growth between 2000 and 2004.
- OCBC policy recommendation: Promote access to high-skilled, high-wage jobs that do exit. “Public policies should be aimed at improving access to higher education. They should be designed to equalize opportunity for higher education through tools such as expanded student aid, community college transfer programs, and early outreach aimed at ensuring that high school graduates are equipped to enter college if they desire to do so. Policymakers must develop creative strategies to insure that the state’s historically under-represented racial and ethnic groups have equal access to high education and the employment opportunities available to those with additional education.” (Source – Closing the Gaps: Employment Demand and Workforce Training in Orange County’s New Economy. The Orange County Business Council, 2000, page 70)
- OCBC policy recommendation 2: Form better links between education and training and the business world. “It is important to link the missions of education and training more closely to that of the business world. Because of global competition and technological change, the needs of business change ever more rapidly, as do their specific demands for occupational and skill training. Building a flexible system that can change to meet industry’s specific training needs while maintaining a broader perspective and emphasis regarding employability skills is truly a challenge.” (Source – Closing the Gaps: Employment Demand and Workforce Training in Orange County’s New Economy. The Orange County Business Council, 2000, page 71)

V. Trends in Higher Education – Statewide and National

- Skyrocketing public college enrollment demand has been projected for California: “Tidal Wave II.” An unprecedented 714,000 additional students, over and above the fall 1998 enrollment, are expected at the doors of California’s public colleges and universities by 2010. Community College enrollment is expected to grow nearly 36%, go up some 37% at the CSU, and 32% at the UC. About 72% of the new student enrollment demand will be due entirely to population growth. (Source – CPEC Enrollment Projections, 2000 Series, November 2000.)
- When doing their periodic strategic planning at most institutions, IT is neglected. IT’s growing role includes the elements of electronic commerce, distance education, campus portal services, and financing. Only 7.3% of those surveyed had a plan for e-commerce, 29.3% had a distance educational plan; 13.2% were planning for campus portal services. IT provides for more campus services on the web. 75% of the institutions in the 2000 survey provide online undergraduate applications; 83.1% have course catalogs available online; course reserves are available on the Web at 35% of the institutions; 55% offer one or more full college courses via the Web. (Source – Annual Campus Computing Survey, Feb. 2001)
- Community Colleges, like all post-secondary institutions, will be increasingly accountable for student learning.
 - o The new accreditation standards prompt for evidence that students are learning.
 - o Partnership for Excellence may be a precursor of program based-funding for the California Community Colleges.
 - o The California Legislative Analyst’s Office recently issued a white paper on increasing accountability in pre-collegiate education. Among the recommendations was 1) CCs should assess and annually report on the proficiency of all entering students, and 2) CSU and UC should assess and annually report on the proficiency of all transfer students. All segments should report on the effectiveness of their basic skills/pre-collegiate programs. (Source – LAO: Analysis of the 2001-02 budget bill: improving academic preparation for higher education)
- All of higher education is moving toward outcomes-based assessments, with online education leading the way, says Peter Ewell, senior associate at the National Center for Higher Education Management Systems. The push for new assessment models in online education comes largely from competition with its older brother, traditional education. Because distance education is comparatively new critics hold it to a higher standard than traditional education when judging quality. Online education is only one of several influences putting pressure on traditional education to do more to assess the quality of courses. Accreditation agencies, state governments, and policy boards are all heading toward assessment. Assessment methods being implemented range from 100 item multiple-choice tests administered before and after the course, to successful completion of projects related to the course’s or program’s content. (Source – Chronicle of Higher Education, April 13, 2001).
- Colleges can expect more competition in the form of on-line course delivery. At least 35 states now have a virtual university. Many colleges are rushing to put on-line courses together because they’re afraid of the competition from other colleges and states. (Source – Chronicle of Higher Education, July 6, 2001)

- In his article in the Chronicle of Higher Education, Levine (2000) predicts these changes in the future of colleges:
 - o Higher-education providers will become even more numerous and more diverse. Technological capabilities are encouraging the rise of global universities, which transcend national boundaries. The most successful institutions will be those that can respond quickest and offer a high-quality education to an international student body.
 - o Three basic types of colleges and universities are emerging. They are “brick universities” (traditional residential), “click universities” (new, usually commercial virtual universities), and “brick and click” (a combination of the first two). The most competitive and attractive higher-educational institutions will be “brick and click.”
 - o Higher education is becoming more individualized; students *not* institutions will set the educational agenda. New technologies will enable students with very diverse backgrounds and needs to receive their education at any time and any place.
 - o The focus of higher education is shifting from teaching to learning. Colleges now emphasize a process based on “seat time,” or the amount of time each student is taught. Students study for a defined number of hours, earn credits for each hour, and, after earning a specified number of units, earn a degree. With the increasing number of educational providers, the individualization of education, and the growing diversity of the study body, the commonality of process is likely to be lost. The focus will shift to the outcomes that students achieve. Time will become the variable and learning the constant. This development will raise questions about the value of a two-year or four-year degree. It also shifts the definition of excellence from the institution’s selectivity for admitting students to the value that the institution demonstrably adds to each student’s learning experience.
 - o Degrees will wither in importance. Today, the meaning of a degree varies in content and quality, depending on the college. In essence, we offer thousands of different degrees, even if they are called the same name. A degree now signifies a period of successful college attendance. With the change in emphasis from institutional process to educational outcomes, degrees will become far less meaningful. A transcript listing each student’s competencies, including the specific information that the student knows or skills he or she can perform, will be far more desirable. If degrees become less important, how will we continue to attract students in a world offering limitless educational choices? (Source – Arthur E. Levine, President of Teachers College of Columbia University, Chronicle of Higher Education, October 27th, 2000)

VI. Economic, Political and Legal Trends That Could Impact Community Colleges

Economic Trends

- Hourly pay remains higher than the national average but the current national minimum wage is likely to increase in the next five years.
- If the “guest worker” program is expanded and provides legal status to many illegal residents, the hourly rate will also increase.
- An expanded quest worker program could also current illegal residents to enroll in colleges as in-state students.
- Orange County continues to grow in high tech industries but most of the new employment comes from service and tourism related industries.

Environmental Trends

- Many district residents will demand greater emphasis be placed on environmental issues. This will slow the growth of many projects. Concerns about clean water, clean beaches, increased traffic, air pollution, and open spaces may overwhelm the push for new economic initiatives. Such environmental concerns in a district which is 90% built out will force greater demands for community redevelopment and improvement in the district's infrastructure – sewers, water, etc.
- The alleged energy crises will probably not raise its ugly head in the next five years because of the new non-nuclear power plants ready to go on-line. However, nuclear power plants will continue to be hotly debated.
- There will be increased interest in alternatively fueled vehicles – particularly if there is a tax incentive for their purchase or if technology decreases their cost.

Competitive Conditions

- Students will seek the best program not only for their money but also their time – this philosophy will force more traditional institutions to become competitive for Coastline students.
- Also, many students recognize the greater importance of industry certifications that they view as more important to potential employers than degrees.
- Students will seek colleges that will prepare them to meet industry standards including completion in the shortest amount of time, at the greatest convenience to the student – particularly in urban areas such as Orange County where the students have so many educational options.
- Several private entrepreneurial universities (e.g., Webster, Golden Gate) have closed their Orange County operations in 2001.
- Through distance education, students have many opportunities to enroll in universities around the world.

Student Trends

- 60% of the spring 2001 graduating seniors under the age of 30 expected to live in their parents' homes for at least 3 years following their graduation. (Source – American Demographics)
- More K-12 students are being educated in their homes. (Source – American Demographics)
- Private K-12 schools continue to grow rapidly in Orange County. (Source – American Demographics)
- Today's students are in no hurry to set up homes and have families before the age of 30. (Source – CC student focus group).
- Cohorts or teams of friends sharing the same educational experience is important to today's students – the “learning community” concept.

- Courses offered over the Internet are frequently more popular than the same courses offered in a classroom setting. Many students believe they receive more individualized attention from the instructor. Others believe the Internet courses are more condensed and will be completed in a shorter period of time.

Legal Political Trends (Source – Congressional and state legislative staff resources)

- Immigrant reform will have the greatest political/psychological impact in California and our district if the current illegal residents are given legal residential status.
- Greater educational accountability at the national and state level in exchange for increased funding will occur. At the federal level this accountability could come in the form of standardized achievement examinations for all students on federal financial aid.
- Through federal legislation, funding for California’s occupational programs could become tied to student performance and outcomes.

Internal Scan

I. Trends Identified in Coastline’s Program Review Process

- Basic Skills Program. The Basic Skills program has been experiencing declining enrollments. Enrollments peaked in spring 1996 (22.74 FTES) before beginning a steady decline that has continued to this date. Fall 1996 FTES were projected to be 7.46. Reorganization of the Basic Skills program is underway. Despite a pattern of declining enrollments in Basic Skills classes in recent years, a fall 1999 survey of faculty indicated that Basic Skills are very important to the future of Coastline (71% of the responding faculty agreed). Sixty-five percent of the responding faculty said that, based upon changing community demographics and workforce requirements, the need for Basic Skills will increase over the next five years. (Source – Basic Skills Program Review, April 2000)
- Math Program. Although surveys of math faculty and students found a satisfactory level of satisfaction with course offerings and instruction, the Math Department is aware of its higher-than-average course attrition rates. Steps being taken to reduce attrition include development of a home-grown math placement instrument to provide more accurate placement of students into math courses, thereby improving retention. The department is also implementing more distance education courses in order to better meet the needs of Coastline’s non-traditional students. Faculty may need training in both the technology and pedagogy required to effectively teach math using less traditional modes of instruction. Learning resources compatible with the newer delivery modes may be required. (Source – Math Program Review, May, 2001)
- Pat Arlington will soon be providing additional input derived from Coastline’s program reviews.

II. Student Trends at Coastline

- Student Body. Coastline students tend to be nontraditional. Only 3% are enrolled full time. Over 20% already have an AA degree or higher. In 1998 only 57% of Coastline's students lived in the Coast District. Seventeen percent lived outside the District, and 26% did not live in the Orange County area. Over the past ten years Coastline has experienced an increase (over 30%) in the number of Asian students and a decrease (over 40%) in the number of Caucasian students. English is a second language for about 23% of our students. The majority (over 56%) work full time. An accreditation survey of the students (n = 810) found that over 50% of the students reported that neither of their parents had attended college. Students between 25 and 50 years old comprise the majority (over 50%) of the student body. The source (local high school) of first semester college students enrolling at Coastline in the fall (*research in progress*). (Source – Institutional Self-Study Report 1999-2000)
- Graduation Trends. A growing proportion of graduates (43%) live outside of Orange County. There is a downward trend in the number of certificates awarded at graduation but an increase in the number of AA degrees awarded. A greater proportion of the graduating class (56%) than ever before plans to pursue a higher degree. (Source – Brief Analysis of Coastline College Graduates, 2001, Rudmann)
- Distance Education Outcome Trends. *Research in Progress*