Chapter 2

Results of the External Trends Analysis

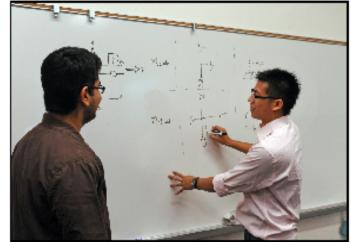
More than 175 articles and information sources were reviewed by the GCCCD scan teams to identify important trends and issues to consider in setting District and college priorities. The articles were categorized into six areas: education, technology, economy, environment, politics, and society. A summary of the results of the trends analysis is presented below. The full trends analysis is available in Appendix A.

1.0 Education

1.1 An older, more diverse student body will be more self-directed and proactive in their college education.

1.1.1 Students are more diverse.

Students are from ever more diverse backgrounds – educational as well as economic and cultural. The average age of students is increasing, with the average age of the student body in two-year colleges close to 30. These older students tend to be self-directed and proactive in their college education.



- 1.1.2 Students attend college for a variety of reasons. They are more likely to attend part-time and many attend college to prepare for a job or develop their work skills. Full-time students are in the minority.
- 1.1.3 Younger students are much more tech-savvy. The generation of people who were born in the 1990's and beyond has been called the "iGeneration" students who intuitively use technology and navigate the Internet with ease, are constantly connected, highly social and prefer to work in teams. Traditional teaching methods fail to engage them, and they do not relate to a lecture mode.

- 1.2 Increasing demands for efficiency and accountability.
 - 1.2.1 Increasing demand for more completions. A shortfall in college graduates of just under 25 million is predicted by 2025; California alone is projected to need one million more baccalaureate degree holders than current trends will produce by 2025 to meet employer needs. Nationally, two-thirds of the students who enter higher education do not complete a degree within six years. The federal government has called upon community colleges to increase degree and certificate completions by 5 million by 2020 as a component of the larger higher education attainment goal.
 - 1.2.2 Increasing demands for colleges to prepare students for jobs conflict with demands for increasing numbers of students with degrees and certificates.

Given the current economic climate and high unemployment rates, there is high demand for and focus on quickly returning people to work through education and training. Community colleges are in the difficult position of balancing two completion agendas: the person's need to return to work and the nation's desire to be a world leader in terms of the number of degrees and certificates awarded. Stackable credentials, career pathways, and applied associate and bachelor's degrees have emerged as ways to provide opportunity for continued academic progression for those who might otherwise have enrolled in shorter-term training programs.

Increasing demands
for colleges to
prepare students for
jobs conflict with
demands for
increasing numbers
of students with
degrees and
certificates.

- 1.2.3 Increasing demands to provide more structure to educational programs. Community college students are often confused and sometimes overwhelmed by the complexity of navigating their community college experience. Community college students are more likely to persist and succeed in programs that are tightly and consciously structured, with relatively little room for individuals to deviate from paths toward completion.
- 1.3 Increasing attention to and demands on basic skills/developmental education.
 - 1.3.1 More students need to develop their basic academic skills to succeed in college.

Changes in practice related to developmental education are needed to improve students' rates of successful course completion, and to compress the amount of the time required for developmental students to become college ready.

- 1.3.2 Low academic outcomes for students placed into basic skills courses. Students who are placed into basic skills courses are less likely to complete their intended educational path than are students placed in transfer-level courses; those basic skills students who do complete take longer than their college-ready peers. Overall, very few students who began at the lowest levels of remedial coursework ever completed the last course in the remedial sequence or beyond. The lower a student's starting level in a remedial mathematics or writing sequence, the less likely the student was to complete a college-level course in that subject or a course one level below.
- 1.3.3 Alternative approaches to addressing basic skills success. Skills in reading, writing, and mathematics are key to academic learning, but are conventionally taught separately from the discipline areas to which they must be applied. Alternative approaches to teach basic skills that may be helpful

In addition, students are more likely to successfully complete developmental courses offered in a compressed format than in regular-length developmental education courses.

in improving the outcomes of academically underprepared college students include (a) contextualization, which makes explicit connections between reading, writing, or math and instruction in a discipline area; and (b) integration, an instructional approach in which academic skills are integrated into the subject content. In addition, students are

more likely to successfully complete developmental courses offered in a compressed format than in regular-length developmental education courses, regardless of the students' age, gender, and ethnicity.

- 1.4 Declining taxpayer funding will restrict access and put more financial pressure on colleges and students.
 - 1.4.1 Declining public funding shifts costs to students. There has been a fundamental shift to individuals bearing more of the cost of higher education, leading to families taking on unprecedented levels of debt or choosing to pursue a 2-year degree instead. However, California's budget for the fiscal year beginning July 2011 is 5% lower for community colleges, which means they may have to turn away about 140,000 students (the entire system enrolls over 2.9 million students).
 - 1.4.2 Declining access to the community college may lead to increasing conditions for enrollment. Access to the community college will be reduced in response to the combination of reductions in course-section offerings because of state budget cuts and concurrent strong demand for college services

by adults seeking retraining and other skills. Many students – particularly first-time students – have not been able to enroll in the classes they need to progress toward their educational goals, effectively rationing access. Statewide changes in registration priorities for community colleges have been suggested in the Legislature, with higher priority given to new and continuing students who have completed all matriculation requirements (for orientation, assessment, etc.) and are making satisfactory progress toward their educational goals.

1.4.3 Declining access to California's public four-year institutions. Funding reductions at the University of California and California State University are leading those institutions to reduce their enrollments and increase their requirements for Transfer Acceptance Guarantee programs.

Funding reductions at the University of California and California State University are leading those institutions to reduce their enrollments and increase their requirements for Transfer Acceptance Guarantee programs.

- 1.5 Trends in technology and demands for accountability change priorities for funding of programs and disciplines.
- 1.5.1 Intense focus on math, reading, and science. There is a strong and growing demand for better qualified teachers in K-12 grades, particularly in math and science. With more focus on math and science education, schools are focusing less on liberal arts and humanities despite their impact on learning and development of critical thinking skills.
- 1.5.2 The ongoing development of new technology is in creasing the demand for technology programs and curriculum options. There is increasing demand for applied and interdisciplinary programs, greater focus on information literacy, and more demand for experiential learning such as cooperative education, internships, service-learning.

2.0 Society

- 2.1 San Diego County is receiving an increasing number of refugees. Chaldean Iraqis are the fastest-growing refugee community in San Diego County, followed by Burmese refugees and Somalis.
- 2.2 Healthcare costs place an increasing demand on private and public funds, particularly as the population ages. Three health behaviors (poor nutrition, lack of physical activity, and tobacco use) contribute to four diseases (heart disease/stroke, cancer, diabetes and respiratory disease) that cause more

than 50% of the deaths in San Diego County. Obesity is becoming more prevalent among both adults and children, and the percentage of the U.S. population with diabetes has tripled since 1990. U.S. medical costs associated with obesity were estimated at \$147 billion in 2008; health care costs for people with diabetes totaled \$116 billion in 2007.

3.0 Technology

- 3.1 Technology is increasing access to information around the world, fostering increased communication and collaboration, and placing new demands on education. Technological competence needs to be continually emphasized, and professional development must provide training and support in using technology to enhance teaching and learning.
- 3.2 Technology and the Internet offer new ways to create, publish and access information, but this makes it more difficult to judge the validity of that information. Digital media literacy is becoming a key skill in every discipline and profession.
- Technology

 places new

 demands on all

 college

 services.
- 3.3 The demand for mobile access to learning resources will rise as people increase their wireless access to networks and the Internet.

 However, there are differences in the extent to which different groups have access to wireless resources, especially fast (broadband) connections.
- 3.4 Continued growth in and demand for online learning offers students more learning options. It also puts more demands on faculty, who must rethink the way they lead a class and learn to use data and online feedback to evaluate whether students comprehend the curriculum.
- 3.5 Technology will facilitate the development of new disciplines and career opportunities.
 Programs in information technology and computer and video game design are in demand and are now offered at colleges and universities across the country.
- 3.6 Technology places new demands on all college services. Technology also offers opportunities to reduce costs, but budget reductions make it difficult to take full advantage of those opportunities.

4.0 Economy

- 4.1 Unemployment in California and in the San Diego region has increased in the current recession. The jobs that are open require different skill sets than the skills unemployed workers have, resulting in structural unemployment that has led to a "jobless recovery" from the recession and that may cause a semi-permanent increase in the level of base unemployment.
- 4.2 Education and technical skills are becoming critical to the ability to earn enough to live on and support a family. Over the next decade, nearly 8 in 10

new job openings in the U.S. will require some workforce training or postsecondary education. Half of the 30 fastest growing occupations in America require at least a four-year

college degree.

4.3 There is increasing demand for post-secondary educational institutions to provide skills training and preparation for targeted occupations (including manufacturing, technology and green jobs). U. S. manufacturers are finding it difficult to hire workers educated, trained and qualified to do the work in demand – much of which requires math, science and technical skills.

Many students must go deeply into debt to pay for their postsecondary education.

- 4.4 Many students must go deeply into debt to pay for their postsecondary education. Costs increasingly impact college choice.
- 4.5 There is an increasing focus on green jobs and sustainable industries. Community colleges will be essential to prepare students for jobs in the six green industry sectors: energy, building, fuels, transportation, water, and environmental compliance.

5.0 Environment

5.1 Growing challenges to the ability of the Earth to support its human population have significant implications for social and economic stability. These challenges include exponential population growth; depletion of aquifers in heavily populated areas; depletion of other natural assets (including forests, grasslands, and soils); and climate change causing increased incidence of drought.

- 5.2 Environmental sustainability is a growing focus for colleges. A vision of a sustainable future should guide renovation of existing buildings, design and construction of new buildings, facility operations and maintenance, campus land use, and outdoor recreation.
- 5.3 The availability of water is an issue of growing concern in San Diego. With 80-90% of water used in San Diego imported from outside the region, water conservation and reuse is an increasing focus in the San Diego region.

6.0 Politics and Legal Issues

6.1 More state and federal attention to community colleges includes expectations for increased productivity and accountability for student outcomes. Both state and federal governments are seeking approaches to improve college performance statistics.



A vision of a sustainable future should guide renovation of existing buildings, design and construction of new buildings, facility operations and maintenance, campus land use, and outdoor recreation.

