Career Technical Education/
Economic Development
Strategic Plan
2011 - 2016

College Strategic Plan
Goal 2

CTE/Econ. Dev. Program Reviews

Educational Master Plan
Strategic Plan for Career Technical Education and Economic Development
2011 - 2016

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Integration with the Educational Master Plan

The Strategic Plan for Career Technical Education (CTE) and Economic Development stems from, and is integrated with, the Educational Master Plan. In fact, the CTE/Economic Development should be viewed as a companion document to the Educational Master Plan. The Educational Master Plan can be viewed on the college website at:

We will use the structure of the Educational Master Plan to organize the presentation of the CTE/Economic Development Plan.

- Foundations
- Planning Context
- Academic Directions

College Goal 2 calls for the CTE/Economic Development Strategic Plan to address the following:

- Inventory and Assessment of Current Programs
- Environmental Scan Data
- SWOT Analysis
- Program Improvement Objectives and Educational Master Planning Goals
- Interaction with and Direction from Local Employers
- Emerging Industries Including Green Technologies
- Key Skill Sets and Concepts for Workforce Success Across the Curriculum

As we integrate these two outlines, some sections of the Educational Master Plan will simply be referenced, some will be restated to reinforce more important concepts and information, and some concepts and information specific to CTE and Economic Development will be included.

A. Foundations

The foundation section of the Educational Master Plan focuses on the overarching educational philosophy and principles of Ohlone College. The college mission and values are also expressed. Further, the commitment to the Learning College Model is discussed and the students we serve are described. Our CTE and Economic Development programs and activities certainly operate with the college’s philosophical principles, mission and values; and are fully aligned with Learning College Model.

What follows now are some additional principles specific to CTE and Economic Development, as well as some foundational definitions that will be presented in the following.

1. Principles

All of the Foundation Planning Principles articulated in the Educational Master Plan apply to Career Technical Education (CTE) and Economic Development. In addition, the following principles will specifically guide our work at Ohlone in the areas of Career Technical Education and Economic Development:

Career Technical Education (CTE) and Economic Development are important components of the college mission and for a synergistic system to serve students and the community. The institutionalized capacity of CTE courses and programs are used in the Economic Development activities and from this involvement the CTE program capacities are enhanced.
Deans and faculty across the academic Divisions are involved in CTE and Economic Development programs and activities.

The VP and AVP of Academic Affairs work with Deans and Directors to coordinate CTE and Economic development programs and activities.

The CTE and Economic Development planning are integrated with the Educational Master Plan, especially projections for current programs and new program development directions.

The goals and objectives of the CTE and Economic Development Strategic Plan come from the Program Review process, as well as the Educational Master Plan.

CTE and Economic Development program and activities are integrated with the Student Services departments and programs.

CTE and Economic Development activities are responsive to the the local employer community.

CTE and Economic Development activities are integrated with the K-12 and ROP feeder schools and the four-year colleges and universities our students attend.

We will focus on maintaining and developing capacity in these two distinct, yet highly inter-related segments of our college mission:

2. Definition of Terms

Often in education, communication and consensus can be obstructed by the vagueness of terminology leading to multiple perceptions of meaning. This is certainly the case with the two terms that are pertinent to this strategic plan:

1. Career Technical Education       2. Economic Development

Over the years many different terms have gone in and out of vogue, such as Vocational Education, Occupational Education, Workforce Education, Job Training, Professional Training, Career Education, Technical Training, Community Education, Economic Development, Workforce Development, and so forth. To complicate matters, some of these terms become associated with particular “funding streams” at the state a local levels, which may or may not adequately represent the scope of the programs associated with the terms. These differing definitions and perspectives of these terms lead to mental models that can vary widely and lead to dissonance and schools and colleges try to operate programs.

Without going into the multiplicity of perspectives and mental models of these terms and the reasons for them, the point of this section of the plan is to state specifically what these terms mean at Ohlone College for purposes of providing programs and services to students. This will involve articulating specific operational definitions of CTE and Economic Development to guide our work.

As a context for our definitions, it is important to look carefully at the college mission statement:

The Mission of Ohlone College is to serve the community by offering instruction for basic skills, career entry, university transfer, economic development, and personal enrichment for all who can benefit from our instruction in an environment where student learning success is highly valued, supported, and continually assessed.

Also, as a context and conceptual framework for our definitions, we will use as the accompanying chart entitled, “Career Technical Education and Economic Development Framework at Ohlone College.”
Career Technical Education and Economic Development Framework at Ohlone College

**Career Technical Education**

**Institutionalized Educational Program**
- Identified Career Pathway With Ongoing Demand
- Regular Schedule Program Offering Fall - Spring - Summer
- Full Time Faculty Adjunct Faculty State Funding
- Institutionalized Pathway Program Offering Staff Educational With Ongoing Fall - Spring - Advisory Committee Sometimes
- Program Demand Summer Classrooms Augmented with Technology Grants or Donations

Not all programs are the same in structure. Not all needs are for traditional CTE. For instance, Are Basic Skills and ESL CTE programs?

**Economic Development**

**Situational Training Program**
- Immediate Need Workshop, Course Can be Program Targeted Group Usually Intensive Time Frame
- Specific Structure and Outcomes For Particular Situation
- Customized Program Design Often in Collaboration With Sponsor Or Funding Source
- May Increase PROGRAM CAPACITY

**Development Process**

- Program Capacity
- And Workforce/Econ. Development Team
- Customized Contract Education With Employer or Through the WIB Or Targeted Grant Program Or Other Source

Not all situations will be this structured or clear.
Before specific operational definitions can be stated, a broader discussion is needed to explain the basis use. The next two sections provide that discussion for CTE and Economic Development culminating with a definition for each. A third section will discuss how these two segments of the college mission, although having distinct operational definitions, for a synergistic system at Ohlone.

3. Broader Discussion of Career Technical Education

When we use the term Career Technical Education, or CTE, we will be referring to those ongoing courses and programs that relate to the “career entry” emphasis of the mission statement.

The Community College Chancellor’s Office has a coding system whereby all courses in a college’s curriculum are given what is known as a Student Accountability Model (SAM) Code. In the past the term Occupational was used for what is now referred to as CTE. The SAM Codes were devised to separate “occupational” from “non-occupational.” There are five same codes that could be assigned to a course:

- A = Apprenticeship
- B = Advanced Occupational
- C = Clearly Occupational
- D = Possibly Occupational
- E = Non-Occupational

At Ohlone we consider SAM coded courses B, C and D, and the programs they support, as making up the CTE curriculum (we do not have Apprenticeship courses).

The courses with SAM codes of B, C and D cluster within academic departments and are arranged in formats whereby students may earn Associate Degrees, Certificates of Achievement (18 or more units), and Certificates of Completion (less than 18 units).

Very important note: CTE does not mean non-transfer. In prior industrial era times, there was separation between what was considered “vocational” and what was seen as “transfer” or “academic” courses and programs. The notion being that if you were in a vocational program or “track,” you would be going directly to the workforce upon completion and would not go on to a four-year school. This idea was applied to both K-12 and community college programs. However, in the modern technology and service economy, many community college CTE courses do transfer to four-year schools and many community college CTE programs have parallel majors at four year schools.

Referring to the accompanying chart, “Career Technical Education and Economic Development Framework at Ohlone College,” CTE has the follow characteristics:

- Formal, ongoing, institutionalized courses and programs of the college
- Identified career pathway with ongoing demand
- Regularly schedule program offering the regular fall, spring and summer terms
- Full time faculty are assigned, as well as regular adjunct faculty
- Enrollment is funded largely through state apportionment and the college's general fund

Students participating in CTE programs have a variety of goals. Some come to prepare to start their first career, while others come to make a career change. Some come to improve in their current career. Some come to take just a specific course or two, some wish to earn a certificate, while others intend to complete a degree. Some students plan to take their learning immediately into the workplace, while others intend to transfer to a four-year school.
CTE programs vary from one another in their focus, structure and service to students. The curriculum of some of the program (Interpreter Preparation, Nursing, Respiratory Therapist, Physical Therapist Assistant) have a highly structured sequential curriculum, which students follow in cohort groups. Other programs have high sequential curricula but students work their way through on a more individual basis. Other programs, although having a structured curriculum, are of more interest to students because of particular courses that are offered (Broadcasting, Interior Design, Real Estate).

Very importantly, CTE courses and programs represent and institutional capacity of value to current and future students, as well as for the economy and the community. This capacity is of particular importance in our perspective and definition of Economic Development that follows.

4. Operational definition of CTE

Career Technical Education (CTE) consists of courses with SAM Codes of: B. Advanced Occupational; C. Clearly Occupational; and D. Possibly Occupational, and the programs they support. CTE courses are clustered in academic departments and arranged in formats whereby students may earn Associate Degrees, Certificates of Achievement (18 or more units), and Certificates of Completion (less than 18 units). CTE does not mean non-transfer, as many community college CTE courses do transfer to four-year schools and many community college CTE programs have parallel majors at four year schools. CTE programs are part of the formal, ongoing, institutionalized courses and programs of the college involving identified career pathway with ongoing demand and are part of the Regularly schedule program offering the regular fall, spring and summer terms. Permanent full time faculty are assigned to CTE programs, as well as regular adjunct faculty. Enrollment is funded largely through state apportionment and the college's general fund.

5. Broader Discussion of Economic Development

When we use the term Economic Development we will obviously be referring to those ongoing activities and services that relate to the “economic development” emphasis of the mission statement.

Economic Development is a relatively new component mission of the state community college system. As such, it can take a variety of different organizational forms depending on the way a college defines and structures this part of their mission. Again, the purpose here is to provide the working definition at Ohlone.

At Ohlone, Economic Development means those activities that use the CTE capacities of the college to address immediate needs that arise for education and training related to workforce development in the community or region.

Of particular note, the term Workforce Development is often used to mean Economic Development but it is also often used to mean CTE. The resulting confusion can be obstruction to shared perspective. To avoid this confusion without attempting to solve it, we will simply avoid using Workforce Development as a distinct program or operational term in this plan.

Referring to the accompanying chart, “Career Technical Education and Economic Development Framework at Ohlone College,” Economic Development activities have the follow characteristics:

- Immediate need, workshop, course, short-term, intensive time frame
- Targeted group and skill set
- Specific structure and outcomes for particular situation
- Customized program design often in collaboration with the employer or funding source
There are two major strategies for conducting Economic Development programs and services. These are Community Education and Contract Education. And at times there can be a hybrid model of the two. Through Community Education, the college offers fee-based classes aimed at meeting a particular demand for education and training; not-for-credit; open to the general public; must be self-supporting. In Contract Education an employer or agency contracts with the college to offer specific instruction or services to a particular group of employees or individuals; can be closed to the general public; must be self-supporting; fee must be charged to the employer – individuals cannot be charged. Credit courses can be offered.

6. Operational Definition of Economic Development

Economic Development means those activities that use the CTE capacities of the college to address immediate needs that arise for education and training related to workforce development in the community or region. This response usually takes the form of short-term, intensive programs targeted to specific groups and skill sets, and most often feature customized program designs developed in collaboration with the employer or funding source. Two major strategies for conducting Economic Development programs and services are Community Education and Contract Education and at times there can be a hybrid model of the two. Economic Development activities must be financially self-supporting by generating revenue through student fees, contracts, and grants.

7. Capacity and Synergy

The concepts of capacity and capacity enhancement are key ideas at the core of our CTE and Economic Development system as described in the accompanying chart, “Career Technical Education and Economic Development Framework at Ohlone College,” and can be summarized as follows:

The capacity the college has in the CTE areas can be packaged through our Economic Development process into customized programs and services in response to workforce, community or individual needs.

By engaging in the Economic Development process, CTE program capacities can be enhanced.

Thus, there can be a strong synergy between CTE and Economic Development leading to improved college programs for students and more responsive education and training to meet the ever-changing needs of the community, the workforce, and the economy. The entrepreneurial nature of Economic Development provides a laboratory for program enhancement and an incubator for new program development.

B. Planning Context

College Goal 2 directs the development of Five-Year Goals, Objectives and Actions Plans for CTE and Economic Development programs and services. All CTE and Economic Development areas participate in the college’s Program and Services Review Process. As stated in the principles at the beginning of this plan, “The goals and objectives of the CTE and Economic Development Strategic Plan come from the Program Review process, as well as the Educational Master Plan.”
1. Program and Services Review

A major strategy for improving college planning is making Program and Services Review more central to the planning process. The CurricUNET Program Review Module has been designed to create linkage between Program and Services Review and college planning and transforming Program and Services Review from an episodic process (once every four years) to an ongoing process with annual updates.

The CurricUNET Module brings faculty through a step-by-step web-based evaluations process:
- Program Description and Scope: An overview description of the program.
- College Mission: How the program supports the college mission, vision, and one or more of the college values; one or more of the college goals; and one or more of the college objectives.
- SLO Assessment: Expected student learning outcomes at the program level and associated assessment strategies and improvements.
- SLO Matrix: Maps and links course-level SLOs to program-level SLOs.
- Student Achievement: Includes a series of measures including course completion, course retention, persistence, program completion, and associated analysis.
- Program Analysis: Summarizes key assessment findings by describing program achievements and areas needing improvement.
- Program Improvement Objectives and Assessment: Action Plan (1-3 Years): Action steps needed to complete the Program Improvement Objective.
- Use quantitative and qualitative data to describe PIO results and contributions to student success and the achievement of college goals and objectives; and analyze the impact of resources used.
- CTE programs will also complete Labor Market Information Reviews as an addendum to their Program Reviews to meet Education Code 78016.
- Outside Review Results: Could include reviews by advisory committees, other closely related academic departments, focus groups of students, etc…

Clearly individual Program and Service Reviews provide assessment processes and Goals, Objectives and Actions Plans for the CTE and Economic Development programs and services.

2. Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis

Integrated strategic planning involves looking at the strengths, weaknesses, opportunities and threats for the enterprise. This is called a SWOT analysis. The following is a summary of a possible SWOT analysis for the CTE and Economic Development programs and services:

Strengths: High quality, enthusiastic faculty and staff
High quality courses and programs
Strong community support
Fremont and Newark locations very accessible to the District’s community
Growing E-Campus provides increased access
Commitment to environmental stewardship
Regional economy expected to rebound in technology sectors

Weaknesses: Inadequate operating budget
Grade 12 enrollments appear to be flat for the next decade or more
Adult population in the region will only slightly increase over time
Opportunities: Substantial local bond funding for construction and equipment
   Good potential for productive educational partnerships
   Bond funding could be leveraged for donations and grants
   Newark Campus and E-Campus offer chance for experimentation and innovation

Threats: State budget probably will not support previously anticipated growth
   Competition from for-profit schools and colleges
   Competition from other community colleges

4. Six Important Indicators from the Environmental Scan

The following are six selected key indicators from the Environmental Scan in the College’s Strategic Plan
that have implications for CTE and Economic Development programs and services:
1. Much of the employment growth is in computer, electronic, and technical services, consistent with the Silicon Valley environment.
2. Nearly 80 percent of all new jobs created in the United States require an Associate’s degree or less. The dominate mode of training employees is “on the job training,” so the college needs to partner closely with private employers to help provide training programs.
3. Several of the industries projected to add the greatest number of jobs by 2014 align with current college programs, including health sciences, business, and technology are the most common.
4. 63.5% of area jobs are in the mid-wage level ($30,000-$80,000). These are jobs that are often accessible with an associate’s degree, even those at the higher end of the scale. Two of the growth areas also correspond to emerging programs in multimedia and environmental science.
5. Among working age adults, about 52% of Hispanics do not have a high school diploma, compared to 8% of Whites. Alternately, only 12% of working age Hispanics have a college degree, compared with 46% of working age Whites.
6. By 2020, the percentage of the workforce in the state with a college degree is projected to decline and the share of the workforce with less than a high school diploma is projected to increase.

Program and Service Gaps
- Increase the percent of Hispanic/Latino students.
- We need to strengthen capacity in career/technical and workforce development programs.
- We should focus more on the needs of adult students.
- We should continue the development of our E-Campus concept.
- Our Multimedia program is established but may need to grow. The Environmental Science Program is new but growing.
- Student outreach improvement:
  - Focus on the value of associate degrees and college certificates.
  - Promote financial aid more. One-Stop Center should help with this.
  - Does EOPS focus on the emancipated minor group?

4. Goals from the Educational Master Plan

As will be described below, in addition to the Program and Services Review process, the Educational Master Plan contains general projections for CTE and Economic Development programs and services.
C. Academic Directions

1. Inventory of CTE Programs

Relatively speaking we do not have a large number of CTE programs. However, our courses and programs have provided excellent opportunities for students for many years and will continue to do so in the future. The inventory is divided into three segments: CTE Areas with Degrees and Certificates; Areas with CTE Courses; and Emerging CTE Areas. Also, programs being explored are listed.

CTE Areas with Degrees and Certificates

AJ Administration of Justice and Public Safety Consortium
ASL American Sign Language
BA Business Administration – Accounting
BIOT Biotechnology
BRDC Broadcasting
BSM Business Supervision and Management
CAOT Computer Applications and Occupational Technology
CNET Computer Networking and Emerging Technology
CS Computer Science
ECS Early Childhood Studies
GA Graphic Arts and Computer Graphics
ID Interior Design
INT Interpreter Preparation
JOUR Journalism
MM Multimedia Studies
NUR Nursing
PTA Physical Therapist Assistant
RE Real Estate
RT Respiratory Therapist
TD Theater and Dance - Entertainment Design Technology

Areas with CTE Courses

AH Allied Health (Phlebotomy Certificate on hold)
CFS Consumer Family Studies
DEAF Deaf Studies (Direct Employment Program in development)
MUS Music (Commercial Music)
WEX Work Experience

Emerging CTE Areas

CHMT Chemical Technology
ETEC Engineering Technology
ENVS Environmental Studies: Solar Technology; Wind Technology; Ecosystem Restoration; Alternative Fuels Technology
GEOG Geographic Information Systems

Exploration Stage
Pharmaceutical Technology, Medical/Clinical Lab Technician, Clinical Research Associate, Nanotechnology and Nano-Manufacturing, Emerging Technologies in ICT, Bioinformatics
2. 15-Year Enrollment Growth Assumptions: 2010-2025

There are two major factors affecting enrollment growth at community colleges: 1) Student demand can ebb and flow with the economy and local population trends, and 2) State funding sets enrollment caps on growth rates. Often more state funding is available when the economy is good but the good economy can decrease student demand for classes because employment rates are up. Conversely, a poor economy leads to less state funding when unemployment and student demand is up.

The average annual growth rate for Ohlone has been approximately 1.5% since the college opened in 1967. This 42-year history of the interaction between student demand and state funding levels is a solid bell-weather metric for strategic enrollment planning. Using the 1.5% annual growth rate the college would grow from 8,600 FTES in 2009-2010 to 10,752 in 2024-2025. Because the growth rate is compounded annually the effective growth rate for the 15-year period would be 25%.

Another important facilities planning factor are our assumptions about growth at the major instructional locations. The following is the current thinking on enrollment patterns over the next 15 years by location, assuming no building on the Newark Campus during that time:

<table>
<thead>
<tr>
<th>Location</th>
<th>Current Levels</th>
<th>2024-2025</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fremont</td>
<td>5,418</td>
<td>6,236</td>
<td>818</td>
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<tr>
<td>Newark</td>
<td>1,548</td>
<td>2,150</td>
<td>602</td>
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<tr>
<td>Online</td>
<td>946</td>
<td>1,613</td>
<td>667</td>
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<tr>
<td>OOC</td>
<td>688</td>
<td>753</td>
<td>65</td>
</tr>
<tr>
<td>OOC</td>
<td>8,600</td>
<td>10,752</td>
<td>2,152</td>
</tr>
</tbody>
</table>

Fremont Campus: FTES will grow by 15%; Percent of total FTES will drop from 62% to 58%
Newark Campus: FTES will grow by 39%; Percent of total will grow from 18% to 20%
E-Campus: FTES will grow by 70%; Percent of total will grow from 11% to 15%
Off Campus: HS Dual Enrollment Partnerships, Public Safety Consortium and Other Off-Campus
FTES will grow by 15%; Percent of total will decrease from 8% to 7%

3. Growth Projections for CTE Programs

This chart is an update of the program growth analysis charts from the 2001 Educational Master Plan. Those charts proved to be an efficient and effective tool. Programs with designated growth projections other than “M” have an explanatory narrative in the Educational Master Plan. These narratives have been incorporated into the CTE Programs Five-Year PIO and Goals Chart

Legend M: Maintain existing courses/programs; L: Limit courses/programs; AC: Add courses; AFP: Add a full program; R: Reduce courses; DP: Delete program; D: Delete inactive courses; FL: Facility improvements/ renovations; E: New equipment needed; F: Fremont; N: Newark; O: Online; OC: Off Campus

Divisions Birkedahl: Fine Arts, Business and Communications; Buehler: Learning Resources and Academic Technology; Waters: Counseling and Special Programs; Carli: Health Science and Environmental Studies; Gertz: Deaf Studies; Quinta: Science and Technology; Stacey: Humanities Social Science and Math; Warden: Physical Education and Athletics
### A. CTE Areas with Degrees and Certificates

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>Field</th>
<th>Gender</th>
<th>Credits</th>
<th>Gender</th>
<th>Credits</th>
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<td>05005</td>
<td>Birkedahl</td>
<td>Business Administration</td>
<td>AC</td>
<td>F, N, O</td>
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<td>M, FL, E</td>
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<td>06003</td>
<td>Birkedahl</td>
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<td>10002</td>
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<td>13001</td>
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<td>05006</td>
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</tbody>
</table>

### B. Areas with CTE Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>Field</th>
<th>Gender</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>08003</td>
<td>Carli</td>
<td>Allied Health</td>
<td>AP/AC, E</td>
<td>N</td>
</tr>
<tr>
<td>13000</td>
<td>Carli</td>
<td>Consumer &amp; Family Science</td>
<td>M</td>
<td>N</td>
</tr>
<tr>
<td>08007</td>
<td>Gertz</td>
<td>Deaf Preparation/Education (DEP)</td>
<td>M</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td>Birkedahl</td>
<td>Music (Commercial Music)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>08002</td>
<td>Brown</td>
<td>Work Experience Education</td>
<td>AC</td>
<td>OC</td>
</tr>
</tbody>
</table>

### C. Emerging CTE Areas

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>Field</th>
<th>Gender</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>09001</td>
<td>Quinta</td>
<td>Engineering Technology</td>
<td>AFP, E</td>
<td>F</td>
</tr>
<tr>
<td>19001</td>
<td>Quinta</td>
<td>Chemical Technology</td>
<td>AFP, E</td>
<td>F, N</td>
</tr>
<tr>
<td>19001</td>
<td>Quinta</td>
<td>Pharmaceutical Technology</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>03020</td>
<td>Carli</td>
<td>Environmental Studies*</td>
<td>AC/E</td>
<td>N</td>
</tr>
<tr>
<td>08005</td>
<td>Warden</td>
<td>Kinesiology: Athletic Training</td>
<td>AC</td>
<td>F</td>
</tr>
</tbody>
</table>

* Solar Technology; Wind Technology; Ecosystem Restoration; Alternative Fuels Technology

Exploration Stage:

- Medical/Clinical Lab Technician
- Clinical Research Associate
- Nanotechnology
- Nano-Manufacturing
- Emerging Technologies in ICT
- Bioinformatics
4. Program Improvement Objectives and Educational Master Planning Goals

The following chart documents the Program Improvement Objectives (PIOs) from Program and Services Reviews from the CTE programs (many programs are now updating their reviews and this Strategic Plan will be updated regularly to reflect additional PIOs), as well as program goals from the Educational Master Plan.

**Career Technical Education (CTE) Programs: Five-Year Goals from PIOs and Educational Master Plan**

<table>
<thead>
<tr>
<th>Departments</th>
<th>From Program Review PIOs</th>
<th>From Educational Master Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration of Justice</td>
<td>Increase student exposure to modern computer forensics tools to understand how to seize, analyze and process digital evidence to respond to growing instances of cybercrime coinciding with the growth of the internet as documented in the Program Review and Advisory Committee input. Expose AJ-115 (Cybercrime) students to modern computer forensic tools, so they understand how to seize, analyze, and process digital evidence. (2.11.09)</td>
<td>Education Master Plan calls for ASL Lab and classrooms to move to Building 6. Facilities will need to be prepared for this move. Current ASL Lab will be overhauled with new equipment, new computers and high technology usage to keep up with the quality of ASL program. We are pursuing outside funds to support and implement this vision.</td>
</tr>
<tr>
<td>American Sign Language</td>
<td>Continue to upgrade and enhance our Deaf Studies lab (formerly called the ASL Lab) so that ASL students will acquire the target language in a positive very visual learning environment which, given its nature, is a critical part of American Sign Language.</td>
<td>Within the next five years new instrumentation will be needed to insure that our biotechnology program is training students to industry standards. Research and manufacturing in stem cells and their products will require the biotechnology program to offer more classes on these emerging fields of study and medicine.</td>
</tr>
<tr>
<td>Biotechnology</td>
<td>Strengthen Ohlone’s Biotechnology program by updating the curriculum to stay aligned with industry standards, upgrade equipment to meet the needs of an evolving industry, participate in the development of Ohlone’s new Science Center, and increase our ties with local biotechnology companies to give students better access to internships and eventual employment.</td>
<td>The TV program has an urgent need to renovate facilities and equipment to stay current with the industry, which is included in the strategic plan submitted by the TV department. In order to stay current with the industry, TV facilities and equipment need an investment of over $1 million.</td>
</tr>
<tr>
<td>Broadcasting</td>
<td>Migrate the college’s television channel (ONTV 28) control room facilities, news gathering equipment, and video editing equipment from outmoded analog platform to the digital platform thereby providing students the opportunity to train using the hardware and software they will find in the commercial film and television industry. Also permits ONTV 28 to be broadcast around campus thereby improving.</td>
<td>U.S. licensed radio broadcasting continues its evolution toward HD</td>
</tr>
</tbody>
</table>
| Administration-Student Communication by Airing Updates, Notices, Orientation Videos, Program Guides etc. (2.11.09) | Develop system within Datatel that would automatically alert students and staff when certificate of accomplishment coursework has been successfully completed and possibly automatically record the achievement on the student's record to simplify the process for students and enhance completion numbers. 
Modernize lighting equipment for film and video classes. 
Send live broadcast quality video and audio from anywhere on Fremont or Newark campus to Television Center for broadcast on ONTV 28 and streaming to internet. 
Stream college television channel to multiple sites on Fremont and Newark campuses. 
Create video editing lab in SC 173. 
Replacing and modernizing this equipment will keep Ohlone College’s Broadcasting Department vital and current. It’s an investment in our students, and the future of our college. 
Encourage more students to get Certificates of Accomplishment. 
Digital transmission. Even though HD digital is currently available only as a sub-channel option within channels on the existing FM band, it can be assumed that a migration to main-channel digital is in the future. It would be prudent to budget $20,000 to modify the existing analog transmission chain in the 6-10 year window. |
| --- | --- |
| Business Administration | Redesign and upgrade the BA Web page to include links to all full-time and adjunct faculty sites, new programs such as International Business, and other pertinent, current information response to the documented need for improved communication between the College and the student community. 
The following new courses should be added: Introduction to Accounting Information Systems, Financial Accounting for Non-Accounting Managers, Governmental Accounting. |
| Business Supervision Management | Make all courses for the BSM program available completely online. The last course that needs to be converted over is BSM-103, Human Resources Management. Once converted over, Ohlone will have a fully-online Certificate of Achievement for the BSM program. 
Add into each of the BSM courses a section that covers GREEN. Make the Certificate of Completion available online by converting BSM 103 to online format. |
<table>
<thead>
<tr>
<th>Course Area</th>
<th>Description</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Applications and Occupational Technology</td>
<td>Keep up with the current technology needed to achieve the computer application programs SLO’s. Initiate coursework modification to align curriculum with current practices and theories with industry standards</td>
<td>Courses need continuous updating to keep up with changing technology. More online courses are envisioned.</td>
</tr>
<tr>
<td>Computer Networking and Emerging Technologies</td>
<td>Revise and expand the CNET System Administration course offerings, certificates, and degree program, to include virtualization design, implementation, and management. (Virtualization is a green IT technology that dramatically improves the efficiency and availability of IT resources and applications in an organization.) (2.11.09)</td>
<td>The CNET program comprises four key areas within Information and Communication Technology (ICT): Technical Support; System Administration; Database Administration and Development; and Networking/Telecommunications. Replacement of computers on a five year recycle plan is desired. Specialty hardware including integrated services routers, switches, wireless access point and controllers, and virtualization servers are also required on a five year cycle. Software licenses are of less importance than IT Industry Academy annual subscription fees for Microsoft, Oracle, VMware, and other potential industry alliances.</td>
</tr>
<tr>
<td>Computer Science</td>
<td>Keep up with the current technology needed to achieve the computer science program SLO’s.</td>
<td>Older computers in the computer science classrooms in Hyman Hall will need to be replaced within five years to provide up-to-date training. New courses will be added to the catalog to meet the technological advances in this field. There is a continuing need to renew the software licenses used to teach computers science during the next five years.</td>
</tr>
<tr>
<td>Early Childhood Studies</td>
<td>Implement a Child Development Laboratory using Developmentally Appropriate Practices as set forth by the National Association for Education of Young Children Accreditation and meeting Community Care Licensing Regulations and prepares students to obtain a ECE California Teaching Permit. (2.11.09)</td>
<td></td>
</tr>
<tr>
<td>Graphic Art/Computer Graphics</td>
<td>Identify students eligible to receive Certificates of Accomplishment in GA, to encourage them to continue with their educational plans. Maintain current technologies in order to properly train students in new software and hardware advances.</td>
<td>The Graphic Arts program will need to replace computers in HH115 within the next 2 to 3 years. Also needed is a new color printer.</td>
</tr>
<tr>
<td>Interior Design</td>
<td>Revise and update the curriculum in the Interior Design Department to reflect current industry trends and practices.</td>
<td>To ensure the continued quality of instruction in the Interior Design program, broken, outdated, worn-out and obsolete equipment and software will need to be replaced with new. This includes a color copier/scanner to replace the failing copier in room 4304,</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Course</th>
<th>Goal</th>
<th>Resources/Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpreter Preparation</td>
<td>Assess effectiveness of recent major revision of the new ASL-English IPP curriculum to see if it impacts student success. Improve the delivery of media to students. As delivery methods and technology advances, students must be able to access prepared media for practice for both their classwork and homework. Currently, we have a mix of analog and digital data but neither is accessible for individuals to work on in our classroom-lab at student stations. Develop solid “Bridge” and Professional Development Courses to address the two areas where “gaps” exist in the preparation of qualified interpreters: following the completion of ASL courses and before entering an interpreter preparation program * professional development (for working interpreters) pre-certified and/or to earn CEUs to maintain certification *Gap described in part, due to BICS (Basic Interpersonal Communication Skills) to CALP (Cognitive Academic Language Proficiency) needed for interpretation. Achieve accreditation through Commission on Collegiate Interpreter Education (CCIE). To enter the interpreting field in the future students will need to attend an accredited program and the IPP program will pursue this accreditation. (Long term objective – 5 years)</td>
<td></td>
</tr>
<tr>
<td>Journalism</td>
<td>Maintain and enhance the quality of the Journalism program through excellence in teaching and mentorship. This program will expand the curriculum in journalism to include more of an emphasis on new media, such as online and mobile delivery of the news.</td>
<td></td>
</tr>
<tr>
<td>Multi Media</td>
<td>Revise the certificates in Video Game Development and 3D Modeling and Animation in response to current industry needs and trends. Revise the certificates in Video Game Development and 3D Modeling and Animation in response to current industry needs and trends. 1-5 years: In the next five years, the program will be maintained and no new courses added. We will need new computers in the next couple of years as the existing iMacs are getting old and slow and will not work with newer software. Minor purchases for equipment (such as camcorders) will be done through the instructional budget. Software maintenance needs to be purchased every year. 6-10 years: New courses may need to be added to reflect changes in technology and needs in the Multimedia industry. New computers will be needed in the next five years due to the rapid advancements in technology.</td>
<td></td>
</tr>
</tbody>
</table>

Identify, track and inform students of their eligibility to receive Certificates of Achievement, Certificates of Accomplishment, and AA Degrees in Interior Design. Macintosh computers in room 4104B, and drafting and graphics software, also in room 4104B.
| **Nursing** | Integrate simulation across the curriculum to enhance development of critical thinking skills required for entry-level clinical decision-making. | Many hospitals are striving to achieve magnet status in patient care. Part of their certification will be the number of Registered Nurses who have graduated with a BS in nursing. Beginning in Fall 2010, we have a one year grant with CSUEB to conduct a seamless ADN to BSN program. In the next two to three years, we would like to study the feasibility to offer this type of program at Ohlone College. We need a partner such as CSUEB for this to be feasible. |
| **Physical Therapy** | Develop a physical therapy clinic that will operate out of the PT Lab space to serve the members of the Ohlone College district and the surrounding community. It will be a space where the students and faculty can practice on actual patients, much like a beauty college or dental school provides discounted services that are provided by their students/faculty. (2.11.09)  
Develop a new course, PTA 110B, that will expand the Physical Therapist Assistant Program Neurology course curriculum to a full year (2 semesters) | |
| **Real Estate** | Develop assessment tools to measure the Real Estate program SLO's (2.11.09) | |
| **Respiratory Therapy** | Integrate scenario based training involving human and mechanical breathing simulators into the Respiratory Therapist Program to enhance learning and increase psychomotor skills necessary for successful clinical practice. (2.11.09) | |
| **Theatre & Dance – Entertainment Design Technology** | The Theatre & Dance department has extensive needs for upgrading or replacing equipment. One of the chemistry labs to be vacated in Building 2 should be converted for use as a rehearsal and performance space for Theatre and Dance. | |
## Areas with CTE Courses

<table>
<thead>
<tr>
<th>Departments</th>
<th>From Program Review PIOs</th>
<th>From Educational Master Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allied Health</td>
<td>To review and possibly revise the Phlebotomy course curriculum in relationship to regulations, current clinical evaluations and evidence based practice. (2.11.09)</td>
<td>The California Employment Development Department has published papers indicating that medical lab technician (MLT) constitutes a skills set higher than those of a phlebotomist. MLTs have more versatility than phlebotomists, as they can work in the medical as well as biotech fields. An AA degree will be awarded after completion of this two year program.</td>
</tr>
<tr>
<td>Consumer &amp; Family Science</td>
<td>To review, update and possibly expand offering in CSF (nutrition) in response to current evidence based practice and student requests. (2.11.09)</td>
<td></td>
</tr>
<tr>
<td>Deaf Studies</td>
<td>Re-design the Direct Employment Program to develop vocational skills training opportunities for Deaf students by creating partnerships with other educational and training programs in the Bay Area and linking programs, staff and services.</td>
<td></td>
</tr>
<tr>
<td>Music (Commercial Music)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work Experience</td>
<td>Centralize the administration of all workforce development programs into one division to streamline communication, reduce duplication of efforts, and benefit students and employers. (2.11.09) Develop a marketing plan to explain the Work Experience Program to counselors, faculty, students, and potential employers. Determine future direction of Work Experience Program to serve students more effectively</td>
<td>Work Experience Education may add new courses in the coming years in order to reflect the college’s efforts with links to industry, internships, and experiential and service learning as the college continues to meet the workforce needs of students and the community.</td>
</tr>
<tr>
<td>Departments</td>
<td>From Program Review PIOs</td>
<td>From Educational Master Plan</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Chemical Technology</td>
<td>Create liaison to coordinate job placement, internship, curriculum development for all STEM programs</td>
<td>New courses and a Certificate of Accomplishment will be added to the curriculum with direction from an advisory committee and faculty research, following which a new Certificate of Achievement and AS Degree will be developed, approved and implemented.</td>
</tr>
<tr>
<td></td>
<td>Maintain a program that is up to date with current industry practices</td>
<td></td>
</tr>
<tr>
<td>Engineering Technology</td>
<td>This new occupational program is now offered primarily by bringing together courses that already exist in the college catalog. However, new courses in Electronics for Technicians; Basic Materials; and others will require supportive instrumentation and equipment during the next five years. The strategy we are employing is to first add a Certificate of Accomplishment in Engineering-Manufacturing Technician during the next five years. This certificate will be followed by a needs assessment and application to the Chancellor’s Office for a Certificate of Achievement and possibly an occupational 2-year degree during the next ten years. In order to properly meet the future training needs of the emerging robotics-related programs and jobs, the robotic kits will need to be replaced within the next five years.</td>
<td></td>
</tr>
<tr>
<td>Environmental Studies</td>
<td>Develop internships, volunteer opportunities or paid temporary work experience for students enrolled in the environmental program as encouraged in the newly approved Environmental Studies and Environmental Science degrees and certificates Initiate coursework on plants and renewable energy that will be continued and expanded at the Newark camps thus connecting ENVS and Biotech departments in beneficial ways in the areas of bio-fuels and sustainable agriculture</td>
<td>The Environmental Studies program is creating a sequence of courses for students seeking careers in the emerging “green” fields and green market place. These courses provide the opportunity to acquire and develop skills and knowledge required for jobs, as well as transfer level courses. Currently there are two certificates in environmental studies. A new certificate in Alternative Energies will be available in Spring 2010.</td>
</tr>
<tr>
<td>Geographic Information Systems – GIS</td>
<td></td>
<td>Within the next five years a new Certificate of Accomplishment will be added. Computer hardware and software upgrades will be necessary to support the program. A Certificate of Achievement is also in the planning stages.</td>
</tr>
<tr>
<td>Kinesiology: Athletic Training</td>
<td>Increase the number of students earning the A.S. - Kinesiology: Athletic Training degree and transferring to four-year institutions with accredited athletic training education programs on an annual basis in response to state directive and current college goal to improve</td>
<td>We will continue to build the relationship with Mission Valley ROP, Irvington High School SHAPE Academy, and the Irvington High School concurrent enrollment connection with the KIN-258 class. Cross-curricular recruitment via assignments in KIN 240 in particular can identify viable and interested students. As</td>
</tr>
</tbody>
</table>
program/certificate completion rates.

Initiate the investigation of opportunities to provide athletic training services to under served entities (high school athletics, regional competitions - 5K, 10K, etc.) in the community via collaborative efforts with team physician group and/or other partnerships (hospitals, sports medicine/physical therapy clinics, etc.).

Improve recruitment of students to the A.S. - Kinesiology: Athletic Training degree program, which represents the only career-entry and transfer focus program in Kinesiology in the area, to increase awareness of this allied health care career path and in response to stated desire to improve program completion rates.

these relationships grow, we predict an increased number of program completers in the AS degree for Kinesiology: Athletic Training. Long term projects include creating an International component to the programs student body. In partnership with the International Programs, we will begin to welcome and recruit International students who have a desire to learn and be trained in the techniques of Athletic Training.

Pharmaceutical Technology
This is a new area of exploration building from the biotechnology and chemical technology programs. Research is currently being conducted on new course development and a possible Certificate of Accomplishment. This program may require some new equipment.
5. Relative Size of CTE Programs

The following chart shows the relative size of the CTE program areas at Ohlone based on data from the Fall 2010 semester.

<table>
<thead>
<tr>
<th>Dept.</th>
<th>Sections</th>
<th>FTEF</th>
<th>WSCH</th>
<th>Ratio</th>
<th>FTES</th>
<th>FTES/Sec</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. CTE Areas with Degrees and Certificates</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CNET Computer Networking and Emerging Technology</td>
<td>50</td>
<td>5.04</td>
<td>4078.14</td>
<td>809.48</td>
<td>127.39</td>
<td>3.67</td>
<td>Yes</td>
</tr>
<tr>
<td>BA Business Administration - Accounting</td>
<td>36</td>
<td>7.73</td>
<td>4977.55</td>
<td>644.06</td>
<td>155.49</td>
<td>5.18</td>
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</tr>
<tr>
<td>BIOT Biotechnology</td>
<td>29</td>
<td>3.34</td>
<td>1088.84</td>
<td>325.62</td>
<td>34.01</td>
<td>1.52</td>
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<tr>
<td>CS Computer Science</td>
<td>22</td>
<td>4.32</td>
<td>2703.40</td>
<td>625.90</td>
<td>84.45</td>
<td>5.10</td>
<td>Yes</td>
</tr>
<tr>
<td>CAOT Computer Applications and Occupational Technology</td>
<td>18</td>
<td>1.80</td>
<td>695.19</td>
<td>386.54</td>
<td>21.72</td>
<td>1.51</td>
<td>Yes</td>
</tr>
<tr>
<td>ECS Early Childhood Studies</td>
<td>17</td>
<td>9.44</td>
<td>1956.24</td>
<td>207.21</td>
<td>61.11</td>
<td>4.27</td>
<td>Yes</td>
</tr>
<tr>
<td>NUR Nursing</td>
<td>17</td>
<td>4.23</td>
<td>729.76</td>
<td>172.51</td>
<td>22.80</td>
<td>2.40</td>
<td>Yes</td>
</tr>
<tr>
<td>RT Respiratory Therapist</td>
<td>15</td>
<td>2.34</td>
<td>992.50</td>
<td>423.66</td>
<td>31.00</td>
<td>2.56</td>
<td>Yes</td>
</tr>
<tr>
<td>ASL American Sign Language</td>
<td>14</td>
<td>1.60</td>
<td>1190.58</td>
<td>744.11</td>
<td>37.19</td>
<td>3.19</td>
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</tr>
<tr>
<td>AJ Administration of Justice</td>
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<td>2.72</td>
<td>1430.04</td>
<td>526.21</td>
<td>44.67</td>
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<td>BRDC Broadcasting</td>
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<td>2.17</td>
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<td>141.84</td>
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<tr>
<td>INT Interpreter Preparation</td>
<td>13</td>
<td>1.85</td>
<td>523.92</td>
<td>283.55</td>
<td>16.37</td>
<td>3.21</td>
<td>Yes</td>
</tr>
<tr>
<td>TD Theater and Dance - Entertainment Design Technology</td>
<td>13</td>
<td>2.55</td>
<td>1358.13</td>
<td>532.18</td>
<td>42.43</td>
<td>4.59</td>
<td>Yes</td>
</tr>
<tr>
<td>MM Multimedia Studies</td>
<td>11</td>
<td>2.29</td>
<td>865.37</td>
<td>378.68</td>
<td>27.03</td>
<td>2.59</td>
<td>Yes</td>
</tr>
<tr>
<td>PTA Physical Therapist Assistant</td>
<td>10</td>
<td>1.19</td>
<td>447.00</td>
<td>375.50</td>
<td>13.96</td>
<td>3.02</td>
<td>Yes</td>
</tr>
<tr>
<td>JOUR Journalism</td>
<td>9</td>
<td>0.40</td>
<td>194.26</td>
<td>485.66</td>
<td>6.07</td>
<td>2.01</td>
<td>Yes</td>
</tr>
<tr>
<td>BSM Business Supervision and Management</td>
<td>5</td>
<td>0.46</td>
<td>236.45</td>
<td>511.69</td>
<td>7.39</td>
<td>3.42</td>
<td>Yes</td>
</tr>
<tr>
<td>ID Interior Design</td>
<td>5</td>
<td>1.25</td>
<td>476.00</td>
<td>381.53</td>
<td>14.87</td>
<td>3.42</td>
<td>Yes</td>
</tr>
<tr>
<td>GA Graphic Arts and Computer Graphics</td>
<td>3</td>
<td>0.21</td>
<td>43.93</td>
<td>212.93</td>
<td>1.37</td>
<td>0.47</td>
<td>Yes</td>
</tr>
<tr>
<td>RE Real Estate</td>
<td>1</td>
<td>0.20</td>
<td>102.00</td>
<td>510.00</td>
<td>3.19</td>
<td>3.72</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>B. Areas With CTE Courses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WEX Work Experience</td>
<td>9</td>
<td>0.22</td>
<td>175.34</td>
<td>796.99</td>
<td>5.48</td>
<td>0.55</td>
<td>Yes</td>
</tr>
<tr>
<td>CFS Consumer Family Science</td>
<td>6</td>
<td>0.93</td>
<td>712.60</td>
<td>763.53</td>
<td>22.26</td>
<td>3.86</td>
<td>Yes</td>
</tr>
<tr>
<td>AH Allied Health</td>
<td>2</td>
<td>0.40</td>
<td>224.00</td>
<td>560.00</td>
<td>7.00</td>
<td>3.36</td>
<td>Yes</td>
</tr>
<tr>
<td>DEAF Deaf Studies (Direct Employment Program in development)</td>
<td>1</td>
<td>0.20</td>
<td>30.60</td>
<td>153.00</td>
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<td><strong>C. Emerging CTE Areas</strong></td>
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**High**: 4100.00 21.1%
6. Interaction with and Direction from Local Employers

All CTE programs strive for ongoing interaction with and direction from local employers identify needs of local employers and create responses through our existing programs, contract education, and new program development.

Traditional industry/employer advisory committees exist in all programs as a pathway for input and dialogue.

The Ohlone College Environmental Scan has a focus on employment trends and is updated on a regular basis. CTE programs use this information for direction.

The Ohlone One-Stop Career Center has significant and ongoing interaction with employers and job seekers. The Center is a hub for Labor Market Information and the Director of the One-Stop is an active member of the CTE Team and the Deans Meeting group.

The Environmental Studies Program is active in creating a curriculum which enhances the availability of programs that focus on emerging industries including green technologies and those identified by the Alameda County Workforce Investment Board and Department of Labor’s high growth, high demand job training initiative.

7. Key Skill Sets and Concepts for Workforce Success Across the Curriculum

Objective 4 for College Goal 2: By 2013 provide opportunities across the curriculum for students to acquire key skill sets and concepts that will help them succeed in the workplace.

In 1990, The Secretary's Commission on Achieving Necessary Skills (SCANS) examined the demands of the workplace and the general, or sometimes called soft skills, necessary to meet those demands. Specifically, the Commission looked at the level of skills required to enter employment. In carrying out this charge, the Commission:

- Defined the skills needed for employment;
- Proposed acceptable levels of proficiency;
- Suggested effective ways to assess proficiency; and
- Developed a dissemination strategy for the nation's schools, businesses, and homes.

This report results were based on extensive discussions and meetings with business owners, public employers, unions, and workers and supervisors in shops, plants, and stores. It builds on the work of six special panels established by the Commission to examine all manner of jobs from manufacturing to government employment. Researchers were also commissioned to conduct lengthy interviews with workers in a wide range of jobs.

Although the commission completed its work in 1992, its findings and recommendations continue to be a valuable source of information for individuals and organizations involved in education and workforce development.

We will develop a rubric and a strategy to integrate an assessment using the course level and program level Student Learning Outcomes in the various Program Reviews to determine the extent to which the SCANS skills and concepts are covered in our CTE courses and programs.
### SCANS Skills Chart

#### Foundation Skills

**BASIC SKILLS**
- **Reading** - Locates, understands and interprets written information in documents such as manuals, graphs, and schedules
- **Writing** - Communicates thoughts, ideas, information and messages in writing; and creates documents such as letters, reports and graphs
- **Arithmetic/Mathematics** - Performs basic computations by choosing appropriately from a variety of mathematical techniques
- **Listening** - Receives, interprets, and responds to verbal messages
- **Speaking** - Organizes ideas and communicates orally

**THINKING SKILLS**
- **Creative Thinking** - Generates new ideas
- **Decision Making** - Specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternatives
- **Problem Solving** - Recognizes problems, devises and implements plan of action
- **Visualization** - Organizes and processes symbols, pictures, graphs, objects and other information
- **Knowing How To Learn** - Uses learning techniques to acquire and apply new knowledge and skills
- **Reasoning** - Identifies principals underlying the relationship between two or more objectives and applies it in solving a problem

**PERSONAL QUALITIES**
- **Responsibility** - Displays high standards in approaching and completing tasks
- **Self-Esteem** - Believes in own self-worth and maintains a positive view of self
- **Sociability** - Demonstrates understanding and courtesy to others
- **Self-Management** - Sets personal goals, monitors progress, and exhibits self-control
- **Honesty/Integrity** - Chooses ethical courses of action

#### Workplace Competencies

**RESOURCES**
- **Time** - Identifies activities, prioritizes, allocates time, and prepares and follows schedules
- **Money** - Uses or prepares budgets, keeps records, and makes adjustments to meet objectives
- **Materials and Facilities** - Acquires, stores, allocates and uses materials or space efficiently
- **Human Resources** - Assesses skills and distributes work accordingly, evaluates performance and provides feedback

**INTERPERSONAL**
- **Skills** - Team member - contributes to group effort
- **Teaches Others New Skills** - Helps others learn
- **Serves Clients/Customers** - Works to satisfy customers’ expectations
- **Exercises Leadership** - Communicates ideas, persuades others, responsibly challenges existing procedures and policies
- **Negotiates** - Works toward agreements involving diverse interests
- **Works with Diversity** - Respects differences

**MANAGING INFORMATION**
- **Acquires and Evaluates Information**
- **Organizes and Maintains Information**
- **Interprets and Communicates Information**
- **Uses Computers to Process Information**

**WORKING SYSTEMS**
- **Understands Systems** - Know how social, organizational, and technological systems work and operate effectively with them
- **Monitors and Corrects Performance** - Distinguishes trends, predicts impact, diagnoses variances and makes corrections
- **Improves or Designs Systems** - Suggests modifications to existing systems and develops new or alternative systems to improve performance

**WORKING WITH TECHNOLOGY**
- **Selects Technology** - Chooses procedures, tools or equipment including computers and related technologies