Honolulu Community College’s Mission Statement

Serve the community as an affordable, flexible, learning-centered, open-door comprehensive community college that meets the post-secondary educational needs of individuals, businesses, and the community, and

Serve the Pacific Region as the primary technical training center in areas such as transportation, information technology, education, communications, construction, and public and personal services.

College Skills Center’s Mission Statement

The College Skills Center provides access to the skills necessary for students to become responsible, self-directed learners.

Periodically, faculty, staff, and student assistants of the College Skills Center (CSC) meet to review its mission statement. Meetings in 2004 (3/12, 10/29) resulted in the revised mission statement which is posted on the CSC website at www.honolulu.hawaii.edu/skillscenter/index.html.

Organization of Program Review

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I. Program Description

A. History

The College Skills Center (CSC), originally called The Learning Center, was begun in 1981 with federal funds to provide the college with academic support services such as testing and drop-in tutoring in various subjects. The Center has since converted personnel positions to general-funded positions and has grown to include providing academic accommodations for students with disabilities, distance education testing, and the delivery of entry-level math and English courses.

Most functions of the CSC are held on the third floor of Building 7, except for the Math 20 classes which are held on the fourth floor. Almost every summer, changes are made to provide a better learning environment for students. Computers are used widely throughout the CSC in the computer lab for English 20 classes and the Math 20 computerized class, in the testing room for computerized placement testing and distance education testing, in the open lab area for student use, and in offices for faculty and staff.

B. Faculty and Staff

The College has supported the CSC with a full complement of general-funded positions in the following areas:

- Coordinator of the CSC – 1 faculty at 50%
- English 20 – 1 full-time faculty, 1 faculty at 50%, 2 educational specialists at 50% each, English tutors, lecturers
- Math 20 – 2 full-time faculty, 1 educational specialist, math tutors, lecturers
- Testing – 2 educational specialists at 50% each, student test proctors
- Disability Services – 1 full-time educational specialist
- Office Support – 1 full-time clerical staff

In addition, the Perkins Vocational-Education Grant has funded the following:

- 1 full-time retention specialist
- Faculty-staff tutors
- Proctors/tutors

Finally, through revenues generated from non-credit classes, a part-time educational specialist has been hired for disability and computer technical support.

The full-time faculty/staff of the College Skills Center have changed little over the years thereby allowing for continuity of services. All four faculty are tenured with two of them
at the level of professor. Due to increased responsibilities, one educational specialist has received an increase from Band A to Band B, two specialists received in-grade adjustments, and several specialists have received merit pay for service to the college as members and chairs of various committees. The stability of personnel in the CSC has allowed for continued improvements in service to students.

C. Budget

General-Funded Support

<table>
<thead>
<tr>
<th></th>
<th>FY 2001-02</th>
<th>FY 2002-03</th>
<th>FY 2003-04</th>
<th>FY 2004-05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Testing Svc</td>
<td>$31,620</td>
<td>$32,359</td>
<td>$33,032</td>
<td>$37,527</td>
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<tr>
<td>Disability Svc</td>
<td>$37,800</td>
<td>$40,878</td>
<td>$32,776</td>
<td>$17,665</td>
</tr>
<tr>
<td>English 20</td>
<td>$136,830</td>
<td>$129,226</td>
<td>$141,552</td>
<td>$135,675</td>
</tr>
<tr>
<td>Math 20</td>
<td>$117,558</td>
<td>$123,022</td>
<td>$128,105</td>
<td>$139,635</td>
</tr>
<tr>
<td>Student Assistants</td>
<td>$27,612</td>
<td>$35,488</td>
<td>$34,425</td>
<td>$41,357</td>
</tr>
<tr>
<td>Supply</td>
<td>$17,347</td>
<td>$15,881</td>
<td>$14,249</td>
<td>$13,380</td>
</tr>
</tbody>
</table>

The figures for Testing Services, Disability Services, English 20 and Math 20 include salaries for personnel in those categories. The budget for Student Assistants include student proctors, tutors, and notetakers. The Supply expenditures include purchases to support classes, testing, and disability services. Supplies purchased include white boards, overhead transparencies, transparency and white board markers, tables, manipulatives for math, web cameras, professional subscriptions, and office supplies.

Funds from the Perkins Vocational Education grant from May 2003 have covered a fulltime retention specialist, peer tutoring, and faculty/staff tutoring.
II. Testing Services

A. History
B. Assessment
C. Analysis
D. Action Plan
E. Budget Implications

A. History – Testing Services

The testing room’s location has varied over the years. Until Spring 2005, the distance education and make-up testing services were in a room separate from the COMPASS computerized placement testing. Over the summer of 2005, changes were made to include one intake center adjacent to the testing room servicing COMPASS, distance education, and makeup testing. Distance education and make-up testing have increased recently from 315 test takers in Fall 2001 to 931 in Fall 2004.

Use of Banner I.D. vs. SSN

Since October 1, 2005, the COMPASS placement testing staff has instituted the exclusive use of Banner I.D. instead of Social Security Numbers. Due to the concerns of identity theft, it was agreed and decided upon by the COMPASS Test Administrator, COMPASS Test Coordinator, and the COMPASS Testing Staff that the exclusive use of Banner I.D. would significantly reduce the threat of identity theft to protect the student and institution from identity theft and legal repercussions.

Changes to COMPASS Placement Testing Form

One change to the information form has been the addition of three questions to the examinee to help the test proctor identify the correct version of the computerized COMPASS test to be given to the examinee. Examinees are required to fill out an information form to be used by the placement test proctor to verify the information that is being input onto the computer. The addition of the three questions on the information form helps the proctor to identify whether the test examinee is given the Standard English test (test given to people who speak English as their first language) or the ESL/English as a Second Language test (test given to people who speak English as a second language). The additions were also done to make sure that the examinee is placed into the most appropriate English course.
More CSC Participation

Since Summer 2005, more CSC personnel have become involved with COMPASS Placement Testing. One faculty member and an educational specialist have both become the central figures within the CSC to provide computer technical support to the center and with COMPASS Testing. Prior to Summer 2005, the CSC had a person who provided technical support to COMPASS testing, but that person left to take another position within the college. The college has not officially created a technical support position to handle the needs of the CSC, so CSC personnel contribute their time internally to support these needs. A CSC faculty member has also taken on the role of COMPASS Administrator for Honolulu Community College, which was a role held previously in another department. Duties include setting policies involving COMPASS Testing and the implementation of the cut-off scores for the COMPASS test.

B. Assessment – Testing Services

Evaluation of testing services using student satisfaction surveys is performed periodically each semester for distance-education and make-up testing, as well as for placement testing. In Fall 2004, a survey completed by 154 students receiving distance education or make-up testing services indicated that approximately 27% of the students preferred later evening testing hours. In addition, comments such as “I think testing hours should be available until 9:00 pm due to students who work full time everyday,” and “Please continue to stay open late. It’s a lot of help with other students with working schedules,” are a few indications that although the testing room opened until 7:00 pm two nights a week, later hours would benefit working students. To meet this need, testing services personnel met and rearranged their schedules and without any additional cost, open an hour later until 8:00 pm two nights a week from Spring 2005.

Although most students using the testing room thought the environment was excellent (53%) or good (32%), in the “Other Comments or Suggestions” section of the survey, noise and congestion were indicated to be a problem. Some comments were as follows:
- Slightly noisy, but reasonable.
- The environment was fair because of the amount of noise coming from everyone taking their test. There were a few that were talking.
- Tell others to please “keep quiet.”
- Inconsistent in keep noise down. Was told to be quiet when other helper was asking for whom (instructor) he should get the test from…
- If you can separate the testing room and reception, I think we can concentrate more on the test.

To address the noise issue, during Summer 2005, physical changes were made so that an intake room was created. Prior to entering the testing room, students would first go to the intake room to sign-in, show their identification for verification, receive the test and instructions from the proctor, and then proceed to the testing room to take the test.
Noise levels have, therefore, been reduced in the testing area so students are provided an improved distraction-free environment. Surveys will be conducted in Fall 2005 to evaluate the impact of these changes to testing services.

One major concern, which became especially evident during Summer 2005, was the antiquated condition of the computers students use for placement and distance education testing. All student computers were purchased between 1998 and 99 and run Windows 98 with 64 MB RAM, 4.01-6.01 GB, and PII 333 MHz processors. Numerous system failures indicate that these computers need to be replaced with systems that meet the ITS microcomputer recommendations. Moreover, students have been directly impacted as there have been several incidents when students taking the placement tests were forced to stop and take the test at another site as the testing computers lost all student testing data and froze.

C. Analysis – Testing Services

Alignment with mission
It is the mission of Honolulu Community College to serve the community as an affordable, flexible, learning-centered, open-door, comprehensive community college that meets the post-secondary educational needs of individuals, businesses, and the community.

In line with this, it is the mission of College Skills Center to provide access to the skills necessary for students to become responsible, self-directed learners. As such, we felt that the initial experience for students entering into Honolulu Community College should be one that was welcoming and easily available for use. This has not always been the case for the testing center.
S.W.O.T. Analysis

Strengths
- Students have noted good experiences with faculty and staff
- Highly experienced proctors
- All students must go through testing here prior to entering college

Weaknesses
- Outmoded equipment experiencing frequent breakdowns
- Weak branding and promotion
- Dead space

Opportunities
- Community partnerships may afford the testing center greater access to space
- Changes in policy may allow for timely replacement of ailing equipment
- Unfulfilled customer needs

Threats
- Decentralizing core education
- Some shift in focus looks to eliminate remediation at the college level

Internal Analysis
Although we have enjoyed great response from the students that utilize the testing room’s services, this support has not translated into equipment support for the program. This is not, however, the only possible scenario playing out and the testing center and CSC have made significant changes to address other potential issues.

One area of contention was maximizing dead space in the testing center. Although not a blatant misuse of space, the testing center coordinator restructured the space being used to better accommodate the growing number of students being handled by the testing center, while also making improvements for students with disabilities receiving testing accommodations.

The testing center is now looking at improving its branding and promotion. It is now thought that the testing center may not be receiving the level of support it deserves because of poor self promotion. The program assessment process is now allowing for a better form of communicating our success and needs as a program.

External Analysis
Talks on decentralizing the educational core at HCC are always looming. The threat to the testing center is two fold. We no longer have a flow of students coming into the college needing placement testing, and we eliminate a segment of the community from our potential costumer listing.

Threats notwithstanding, many opportunities have also shown itself in the form of community partnerships and policy changes. Increased representation at committee
meetings have lent itself to increased awareness regarding our equipment replacement policies.

One opportunity would be made possible with the improvement of the computers in the testing center. This improvement would make it feasible to bring in paid testing to the center and slowly allow it to build some funding stability for itself.

**Evidence of Quality and Student Learning**

As a result of the changes influenced by the 2005 student satisfaction surveys, the testing center has shown an overall improvement in customer satisfaction of 11%. The overall testing environment score was good to excellent at 96.8%; The service provided by proctors was considered good or excellent by 99.2% of all student; and 93% of testing room users felt that the hours of operation were convenient, but 16% of all users would like to see the center open longer hours.

**D. Action Plan – Testing Services**

**Secure Funding for Computers**  
Approximately $28,000  
Purchase to take place in four funding cycles  
(1) 1 Server - Intel® Pentium® D Processor 820  
(2.8GHz,DC,2X1M,800MHz FSB)  
1.0GB DDR2 Non-ECC SDRAM,533MHz  
Dell 17 inch E176FP Flat Panel, Analog  
(2) 4 WEBCT + 25 Compass - OptiPlex GX620 DT  
with Int Broadcom(r) GbNIC. Intel(r)  
Pentium(r) 4 Processor 521 with HT (2.8GHz,  
1M, 800MHz FSB)

**Rebuild Server**  
Standardize the server format for ease of troubleshooting  
Locate and install upgrade version of software  
If unavailable, setup server to use NT version of Compass program

**Load Programs**  
Setup “client” terminals - COMPASS  
Setup “client” terminals – WEBCT

**E. Budget Implications – Testing Services**

We will need to make sure that there is a replacement policy in place to systematically replace computers as they are getting older. We also need to ensure that we can budget for a technical support position specific to the CSC testing center. The technical support position will be responsible for the upkeep and maintenance of all computers in the center with a focus on maintaining the operational readiness of the placement testing server. The approximate annual cost of this position will be $33,888.
III. Services for Students with Disabilities

A. Mission

Services for Students with Disabilities (SSD) is committed to assuring equal access to Honolulu Community College facilities, programs, activities, and services by students with disabilities.

SSD is a coordinated effort by staff in two separate campus offices - the Student Health Office and the College Skills Center - to provide essential services in support of campus ADA/504 compliance.

B. Goals

1. To provide accommodations that support student success.
2. To foster an informed and barrier-free learning community.
3. To promote ongoing campus-wide ADA/504 compliance.

C. Program Outcomes

Disability Service Providers will
1. Produce user-friendly information and services for students.
2. Create relevant training opportunities for campus faculty and staff.
3. Implement reasonable options that improve accessibility on campus.
4. Make program improvements based on ongoing assessment and evaluation.

Students who receive disability accommodations through SSD will be able to
1. Follow specified procedures and timelines.
2. Use accommodations effectively.
3. Exhibit self-advocacy skills.
4. Set appropriate short-term and long-term goals.
5. Use study skills effectively.
6. Demonstrate academic responsibility.

D. Program Data Sources – Services for Students with Disabilities

1. Disability documentation
2. Accommodation request forms
3. Academic records in Banner
4. Midterm progress reports
5. Surveys
   - online student survey
   - faculty/staff training needs survey
   - SSD webpage users survey
6. Service evaluation forms
7. Focus group feedback

E. Program Demand – Services for Students with Disabilities

1. Number of documented students: 139
2. Demographics:

\[ 
\begin{array}{c|c|c|c|c}
\text{Majors 2004 - 2005} & & & \\
\text{N=139} & & & \\
\text{Other} & 8 & & \\
\text{UNCL} & 1 & & \\
\text{LBRT} & 41 & & \\
\text{VOC} & 89 & & \\
\text{2004-2005} & & & \\
\end{array} 
\]
3. Trends:
According to data from the National Center on Education Statistics (The Condition of Education 2003), in 1999 – 2000 the percentage of students with disabilities was higher at public 2-year institutions than at public 4-year institutions. This finding affirmed NCES data from a decade earlier showing that 63% of all public higher education students with disabilities were enrolled in community colleges. The trend over the last 15 years indicates that community college programs like those at HCC with its open-door policy will continue to be the favored post-secondary option for the majority of this population of students.
Over the last 3 years, the number of students with disabilities at HCC has grown by 8%. Direct and indirect factors arising from decisions at the federal level will fuel growth in the local population of post-secondary students with disabilities over the next decade. Specifically, Hawaii’s community colleges will experience an inflow of high school students transitioning to post-secondary education with the Individuals with Disabilities Education Improvement Act (IDEA 2004) as well as a new wave of students supported by the Veterans Administration.

At the national level, the 1999 – 2000 data from NCES shows that college students report having the following types of disabilities:

<table>
<thead>
<tr>
<th>Disability</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobility</td>
<td>29%</td>
</tr>
<tr>
<td>Mental illness</td>
<td>17%</td>
</tr>
<tr>
<td>Health</td>
<td>15%</td>
</tr>
<tr>
<td>Visual or hearing</td>
<td>12%</td>
</tr>
<tr>
<td>LD or ADD</td>
<td>12%</td>
</tr>
<tr>
<td>Other</td>
<td>15%</td>
</tr>
</tbody>
</table>

In the same categories, students at HCC during the 2004 – 2005 academic year showed the following percentages (31% fell into multiple categories):

<table>
<thead>
<tr>
<th>Disability</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobility</td>
<td>47%</td>
</tr>
<tr>
<td>LD or ADD</td>
<td>31%</td>
</tr>
<tr>
<td>Mental illness</td>
<td>16%</td>
</tr>
<tr>
<td>Other</td>
<td>14%</td>
</tr>
<tr>
<td>Health</td>
<td>12%</td>
</tr>
<tr>
<td>Visual or hearing</td>
<td>11%</td>
</tr>
</tbody>
</table>

In comparison to the national statistics, HCC’s number of students with mobility impairments is consistently higher. The reason is related to the pre-1977 construction of several key classroom buildings. Floor to floor access requires a freight elevator key request process which results in a significantly higher than average number of students identifying their disability status for mobility assistance at HCC. Additionally, due to the hands-on nature of its training programs, HCC attracts a large population of students with learning disabilities and attention deficit disorder. With IDEA 2004’s strengthened emphasis on post-secondary transition and its relaxed requirements for identifying students as having specific learning disabilities, continued growth in this population is expected. Moreover, the possibility of a sharp rise in mobility and mental disabilities exists due to the increasing number of VA supported local troops returning from duty in the Middle East with war injuries and related trauma.

In terms of disability services, NCES data shows that 42% of students at public 2-year institutions reported having a disability in 1999 - 2000, but only half of them were eligible to receive services. Of those eligible, only a quarter received services. At HCC, anecdotal evidence indicates that a significant number of
students have disabilities that have not been documented and others with documented disabilities choose not to identify themselves or request services. Currently, there is no systematic mechanism to track this data. Future assessment efforts will need to examine this trend and others as they relate to student retention and success.

F. Measures of Efficiency – Services for Students with Disabilities

1. Number of FTE staff
   1 full time APT and 1 full time Civil Service staff with multiple, non-overlapping responsibilities

2. Staff to student ratio
   2:90 on average per regular semester

3. Number of courses supported
   a. Summer 2004: 16
   b. Fall 2004: 248
   c. Spring 2005: 262

4. Number of students served
   a. Summer 2004: 13
   b. Fall 2004: 97
   c. Spring 2005: 102

5. Retention and Success Rates
   • 70% of Fall 2004 students (68/97) continued in Spring 2005
   • Students passed 50% (8/16) of their Summer 2004 classes with a “C” or higher
   • Students passed 71% (177/248) of their Fall 2004 classes with a “C” or higher
   • Students passed 71% (186/262) of their Spring 2005 classes with a “C” or higher

6. Average time to completion of degree
   • Mean: 8.3 semesters for 11 May 2005 graduates
   • Shortest time: 4 semesters
   • Longest time: 16 semesters

7. Budget allocation 2004 - 2005
   a. General
      • Student assistants: $4,796 (CSC)
      • Sign language interpreters: $8590.35 (HO)
      • Materials and supplies: $609 (CSC) + $935.65 (HO)
      • Equipment: $200 (HO)
   b. Perkins
      • Student assistants: $14,624 (CSC) + $22,020 (HO)
      • Sign language interpreters: $18,068 (HO)
      • Materials and supplies:0
      • Equipment:0

8. Cost of program 2004 – 2005
   a. General
G. Assessment – Services for Students with Disabilities

2004 - 2005 Program Outcomes to be Assessed

1. Students will follow specified procedures and timelines.
2. Students will use accommodations available through the College Skills Center effectively.

Subjects
Assessment efforts for the first year focussed on Fall 2004 and Spring 2005 students who were appropriately documented with the Health Office and requested CSC accommodations such as notetaking, testing, or lab assistance. 52 students fell into this category. Of the 52 students receiving services, 38 were enrolled in fall and 39 in spring. 24 were enrolled both semesters.

Measures of Effectiveness

1. P.O. 1: 75% of students will make contact with CSC disability service staff before the first week of school.
2. P.O. 2a: 75% of midterm evaluations will document that students are making satisfactory progress (“C” grade or higher) in their courses.
3. P.O. 2b: 75% of final grades will document that students have achieved satisfactory completion (“C” grade or higher) of their course requirements.
4. P.O. 2c: 75% of students will give a satisfactory rating to the overall impact of their accommodations on their academic progress.

Methods of Assessment

1. Contact logs
2. Midterm progress reports
3. End of term grade checks
4. Online student survey

Activities in Support of Target Program Outcomes

1. Post signs with disability office contact information in every classroom.
2. Expand disability web page and brochure to include timelines.
3. Mail procedural letters to documented students one month before semester begins.
4. Phone/email students who have received CSC accommodations for one week to check on attendance and satisfaction with accommodations.
5. Phone/email notetakers/lab assistants to encourage timely notes and attendance.
6. Send out midterm evals to instructors to document students’ performance at mid semester.
7. Evaluate completed midterm evals for red flags (students performing at C- or below).
8. Call red flag students in for counseling and possible intervention strategies including referral to faculty tutoring.
9. Check end of term grade reports for progress.
10. Keep records of accommodations requests, midterm reports, and final grade reports.
11. Summarize program results at end of academic year and report to campus-wide committee on disability access (CODA-H).

**Resources to Support Designated Assessment Activities**
1. Two disability service providers
2. One ream of paper
3. 100 envelopes
4. Photo copier access
5. Computer access (Word)
6. Designated phone lines (x272 and x282)
7. Email access
8. Banner access to grade reports

**Wish list:**
1. Shared database of student information with Health Office.

**2004 – 2005 Assessment Results**
The Disability Service Providers at HCC identified four measures by which to assess the effectiveness of their program during the 2004 – 2005 academic year. Their first year goal was to attain a 75% success rate for all four measures.

The first measure examined the timeliness of students’ accommodation requests. Results in Table 1 show that in Fall 2004, 38 students requested academic accommodations through the CSC. Of the 38 students, 11 (29%) contacted CSC before August 23, 2004, the first day of classes for fall, to arrange accommodations. 27 students contacted CSC after classes began.

In Spring 2005, 39 documented students with disabilities requested academic accommodations through the CSC. Of the 39 students, 16 (41%) contacted CSC before January 10, 2005, the first day of classes for spring, to arrange accommodations. 23 students contacted CSC after classes began.

Between fall and spring, there was a 12% increase in timely contacts; however, by the end of the academic year, disability services still fell short of its first year goal by 34%.
The second measure assessed the progress students had made in their courses by midterm. Midterm evaluation results in Table 2 show that as of early October 2004, fall students were earning a “C” or higher in 79% of their classes. As of the end of February 2005, spring students were scoring at a “C” or higher in 71% of their classes.

Between fall and spring, there was a 68% increase in the number of midterm evaluations completed; however, the number of satisfactory midterm evaluations decreased by 12%. By the end of the academic year, disability services had fallen short of its first year goal by 4%.

The third measure focussed on students’ final course grades. In Table 3, end of semester grade reports show that fall students earned satisfactory final grades (“C” or higher) in 82% of their courses. Spring students earned satisfactory final grades in 68% of their courses.

Between fall and spring, the number of final grade evaluations increased by 68%; however, disability services had fallen short of its first year goal by 7% at the end of the academic year.
The fourth measure assessed students satisfaction with disability services and the impact those services had on their academic progress. Data collection from the online student disability access survey is ongoing. Results will be reported at the end of the academic year.

H. Analysis – Services for Students with Disabilities

Services for Students with Disabilities staff began its assessment activities with the following assumptions:

- Students who request accommodations early will perform more successfully in their courses than those who request accommodations late.
- If disability staff keep abreast of students’ progress in their courses, staff can better support student success.

Early initial contacts from students allow SSD staff the necessary time to prepare for students’ individual needs in consultation with their instructors and arrange for the most appropriate and best quality accommodations. Time is a crucial factor in securing sign language interpreters, brailled, taped or digitized textbooks, adaptive equipment, and in-class assistants. Because time impacts the effectiveness of SSD operations, staff assumed that it also played a key role in student success.

For 2004 – 2005, data indicate that less than half of the students served made early contact with SSD. Based on SSD’s assumption that early requests support student success, data should show that less than half of the students performed satisfactorily in their courses. In terms of student performance, SSD learned that fall students who submitted accommodation requests late were slightly less successful in passing their courses (61%) than those who submitted requests early (69%); whereas, spring students who requested late were markedly less successful (29%) than their counterparts who requested early (78%). SSD believes that its response time in filling students’ requests helps to mitigate the problem of late requests. However, to sustain effective operations that increase student success over the long-term, SSD will need to improve students’ ability to submit accommodation requests early.

SSD’s midterm evaluation process serves to monitor students’ performance in their courses by the semester halfway mark. SSD sends evaluations forms to instructors asking them to rate students in terms of attendance, assignment quality, quiz and test performance, and basic skills. Students who are performing below “C” grade level (labeled “red-flagged”) are called in for counseling. Both fall and spring results indicate that the midterm evaluation process effectively predicts whether students will be successful in their courses in a given semester. Data show a ± 3% difference between students’ course performance rating at midterm and their final grades. Data also indicate that SSD will need to strengthen intervention efforts to help red-flagged students improve their performance by the end of the semester. End of quarter evaluations may provide the
necessary lead-time for SSD staff to identify struggling students and implement support measures.

I. Planning – Services for Students with Disabilities

Based on the analysis of the assessment results from the 2004-2005 academic year, SSD plans to implement the following changes in the 2005-2006 academic year:

<table>
<thead>
<tr>
<th>Proposed Changes</th>
<th>Responsible Person</th>
<th>Completion Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mail SSD procedures to returning students earlier.</td>
<td>SSD staff</td>
<td>6 weeks before each semester begins</td>
</tr>
<tr>
<td>Specify timelines for accommodation requests in web and brochure info.</td>
<td>SSD staff</td>
<td>completed</td>
</tr>
<tr>
<td>Conduct course evaluations at the end of the first quarter.</td>
<td>SSD staff, instructors</td>
<td>End of first quarter for each semester</td>
</tr>
<tr>
<td>Develop college disability policy handbook. Include as a project in strategic plan.</td>
<td>SSD staff, Administration</td>
<td>End of 2005 – 2006 academic year</td>
</tr>
<tr>
<td>Advocate for campus-wide disability response fund to be included in strategic plan.</td>
<td>SSD staff, Committee on Disability Access</td>
<td>End of 2005 – 2006 academic year</td>
</tr>
<tr>
<td>Study feasibility of mentoring/tutoring services for possible inclusion in strategic plan</td>
<td>SSD staff</td>
<td>End of 2005 - 2006 academic year</td>
</tr>
</tbody>
</table>

J. Conclusion – Services for Students with Disabilities

For the first year of program review, SSD purposely focussed on action plan items that do not incur additional costs to the college. The disability service providers felt that the initial review should focus on evidence gathering to identify the areas needing support and improvement and then determining which activities are immediately achievable within the program’s locus of control. Additional time can then be spent prioritizing the needs that surface and adequately investigating potential solutions before requesting additional resources.

Inherent challenges for college disability programs include accurate budget projections as well as the timely provision of quality services. To allay these challenges, incoming students must self-identify and communicate their needs for the upcoming academic year early in the budget process. The findings in this report underscore that most HCC students do not identify their disability status or submit accommodation requests until
after the semester has begun. Thus, SSD’s efforts to increase the likelihood of early student contacts are valid and will continue to be important.

In addition to the non-cost action steps listed above, significant improvements can be made by way of administrative support for the establishment and enforcement of clear, systematic disability policies. The discussion surrounding program technical standards implementation is a case in point. Student retention and success are positively impacted by students’ selection of courses and programs that match their potential. The need is evident for an authorized protocol to inform students of program technical standards during the admissions process and to properly handle cases in which students do not meet technical standards for admission. Decisive leadership and support for inter departmental cooperation would smooth the way for such policy implementation. SSD will work to include the goals of disability policy development and enforcement in the HCC strategic plan.

Finally, administrators need to incorporate disability funding as a standard line item in the overall college budget in order for the college to appropriately respond to unexpected high cost accommodation requirements in a timely manner. The current reactive nature of disability funding can then be replaced with a responsive program that effectively maintains the college’s program standards while ensuring program access. SSD will make a concerted effort to have this critical issue addressed in the HCC strategic plan.
IV. English 20BCDE

A. History
Initially developed as open-entry open-exit courses, English 20 BCDE are entry-level credit courses taught by full-time faculty and lecturers. Courses are offered for credit thereby keeping the cost affordable. Each module, English 20B, 20C, 20D, and 20E, is a one-credit course or module and is taken as a series of courses credit/no credit. All classes are taught in a combination lecture and lab format. English 20BCDE meets for 3 hours twice a week. Students initially register for the complete series of courses. If students do not complete a module, they are eligible to retake the remaining modules the next semester. Students are allowed to take the each course no more than twice. Students are serviced by the instructor, student assistants, and educational specialists. Packets of assignments created by English 20BCDE faculty are reviewed each year and updated during the summer. The instructors and lecturers utilize the same packet for all classes. The sale of these packets generates revenue to support the cost of tutor services to our students. Packets are designed with clear instructions so that students are provided information to complete assignments on their own to encourage them to be self-directed learners. Each year, English 20 classes serve over 275 students.
B. Student Learning Outcomes – English 20BCDE

ENG 20B
Upon successful completion of ENG 20B, the student should be able to:
- Demonstrate knowledge of specific grammatical concepts.
- Develop, write, edit, and revise papers following specific organizational guidelines using clear effective sentences and coherent paragraphs.
- Read for specific purposes such as identifying main ideas and supporting details, making valid inferences, drawing accurate conclusions, and identifying an author’s purpose.
- Locate specific information.
- Interpret charts and graphs.
- Work cooperatively and communicate orally with others (obtaining information).
- Demonstrate ability to apply direction skills.

ENG 20C
Upon successful completion of ENG 20C, the student should be able to:
- Demonstrate knowledge of specific grammatical concepts.
- Develop, write, edit, and revise papers following specific organizational guidelines using clear effective sentences and coherent paragraphs.
- Read for specific purposes such as identifying main ideas and supporting details, making valid inferences, drawing accurate conclusions, and identifying an author’s purpose.
- Interpret information conveyed orally.
- Work cooperatively in planning and executing a group project.
- Apply appropriate communication skills in a business environment.
- Demonstrate ability to analyze and evaluate comparable items.

ENG 20D
Upon successful completion of ENG 20D, the student should be able to:
- Demonstrate knowledge of specific grammatical concepts.
- Develop, write, edit, and revise papers following specific organizational guidelines using clear effective sentences and coherent paragraphs.
- Read for specific purposes such as identifying main ideas and supporting details, making valid inferences, drawing accurate conclusions, and identifying an author’s purpose.
- Do research utilizing the World Wide Web.
- Utilize the various functions of e-mail.
- Compose an organized well-written paper in a formal timed testing situation.
- Summarize published material.

ENG 20E
Upon successful completion of ENG 20E, the student should be able to:
- Demonstrate knowledge of specific grammatical concepts.
- Develop, write, edit, and revise papers following specific organizational guidelines using clear effective sentences and coherent paragraphs.
Read for specific purposes such as identifying main ideas and supporting details, making valid inferences, drawing accurate conclusions, and identifying an author’s purpose.

C. Quantitative Indicators – English 20BCDE

Registration Data

<table>
<thead>
<tr>
<th>ENG 20BCDE</th>
<th>Spr 04</th>
<th>Fall 04</th>
<th>Spr 05</th>
<th>Fall 05</th>
<th>Spr 06</th>
</tr>
</thead>
<tbody>
<tr>
<td># Courses Taught</td>
<td>6</td>
<td>7</td>
<td>5</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Ave. Class Size</td>
<td>13</td>
<td>29</td>
<td>14</td>
<td>28</td>
<td>27</td>
</tr>
<tr>
<td>Fill Rate</td>
<td>43%</td>
<td>98%</td>
<td>47%</td>
<td>93%</td>
<td>87%</td>
</tr>
<tr>
<td>Semester Hours</td>
<td>24</td>
<td>28</td>
<td>20</td>
<td>24</td>
<td>16</td>
</tr>
<tr>
<td>SSH</td>
<td>630</td>
<td>312</td>
<td>802</td>
<td>270</td>
<td>660</td>
</tr>
<tr>
<td>Course FTE</td>
<td>42</td>
<td>21</td>
<td>53</td>
<td>18</td>
<td>44</td>
</tr>
</tbody>
</table>

Prior to Spring 2004, there was only one collective section listed for each course with a maximum enrollment of 500, and that resulted in very low fill rates. Since Spring 2004 when courses were offered as separate sections and the class maximum enrollment was set to 30, fill rates have been much more reasonable at above 90% for fall semesters and above 40% for the spring semesters. Prior to that, fill rates fluctuated between 16% and 32%.

Because of consistent low enrollments for spring semesters, course offerings were reduced by one course resulting in an increased fill rate from 45% in Spring 2005 and 43% in Spring 2004 to 87% in Spring 2006.
D. Assessment – English 20BCDE

Student Profile

At the beginning of each semester, students in English 20BCDE complete a student profile survey. The survey requests the following information: major, native language, disability, gender, reason in college, educational goal, number of semesters at HCC, ethnicity, marital status, military status, parents’ education, current employment, and credit load.

Approximately 64% of the students are technical-occupational majors, and 28% are majoring in liberal arts. The percentage of students with disabilities indicates an upward trend over the recent semesters:

<table>
<thead>
<tr>
<th>Percentage of Students with Disabilities in English 20BCDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring 02</td>
</tr>
<tr>
<td>24%</td>
</tr>
</tbody>
</table>

This trend indicates that instructors need to address this growing population. From the Fall 2005 semester, taped recordings of reading selections have been made available to all ENG 20BCDE students.

Over the years, the number of first-generation college students has varied from a low of 47% to a high in the most recent Spring 2005 semester of 58%. This year, our college has received a federal grant aimed to service first-generation, low-income college students. It is hoped that these students in English 20BCDE and Math 20BCD classes will benefit from this program, and there will be higher completion rates in courses.

The largest ethnic student population in our English 20BCDE courses has been consistently the Filipinos at 33% followed by Hawaiians at 24%. Group work or teamwork plays an important role in both cultures as well as the workplace in our society, and this aspect has been integrated into course assignments.

Completion Rates

Students must complete English 20E in order to advance to their program major or subsequent English course. Therefore, completion rates for English 20E have been evaluated in detail.
Enrollment and Completion Rates in English 20E

<table>
<thead>
<tr>
<th>Semester</th>
<th># of students enrolled</th>
<th>% of completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2000</td>
<td>172</td>
<td>30%</td>
</tr>
<tr>
<td>Fall 2001</td>
<td>158</td>
<td>31%</td>
</tr>
<tr>
<td>Fall 2002</td>
<td>152</td>
<td>34%</td>
</tr>
<tr>
<td>Fall 2003</td>
<td>164</td>
<td>54%</td>
</tr>
<tr>
<td>Fall 2004</td>
<td>194</td>
<td>58%</td>
</tr>
<tr>
<td>Fall 2005</td>
<td>140</td>
<td>61%</td>
</tr>
<tr>
<td>Spring 2000</td>
<td>131</td>
<td>28%</td>
</tr>
<tr>
<td>Spring 2001</td>
<td>81</td>
<td>38%</td>
</tr>
<tr>
<td>Spring 2002</td>
<td>106</td>
<td>39%</td>
</tr>
<tr>
<td>Spring 2003</td>
<td>107</td>
<td>45%</td>
</tr>
<tr>
<td>Spring 2004</td>
<td>82</td>
<td>40%</td>
</tr>
<tr>
<td>Spring 2005</td>
<td>70</td>
<td>60%</td>
</tr>
<tr>
<td>Summer 2000</td>
<td>33</td>
<td>64%</td>
</tr>
<tr>
<td>Summer 2001</td>
<td>25</td>
<td>60%</td>
</tr>
<tr>
<td>Summer 2002</td>
<td>20</td>
<td>65%</td>
</tr>
<tr>
<td>Summer 2003</td>
<td>28</td>
<td>71%</td>
</tr>
<tr>
<td>Summer 2004</td>
<td>18</td>
<td>83%</td>
</tr>
</tbody>
</table>

Enrollment and completion data have been separated by semesters so the numbers can be more accurately compared since the demand for courses varies between semesters.

Over the past five years, the enrollment for fall semester ENG 20E classes averaged 163 students, spring semester classes averaged 96 students, and summer session classes averaged 25 students. Class enrollments by semester have remained relatively stable over the semesters.

Prior to Spring 2004, all ENG 20BCDE classes were listed in the schedule as “hours arranged” with no class times listed. Students needed to physically go to the College Skills Center to sign up for a certain class time. This procedure was instituted originally to provide students with a “true” open-entry, open-exit model. However, when Banner, the computerized student registration system, was instituted, many students were able to register online. To provide ease in registering for classes, English 20BCDE listed scheduled sections.

This scheduling provided student and instructor with a clear association between meeting time, teacher, and enrolled students. In the first semester of the scheduling change, Spring 2004, the completion rate dipped to 40% from 45% the previous Spring 2003 semester. However, in Spring 2005, the completion rate rose to 60%. In addition to the change in the scheduling of classes, through the Perkins Vocational-Education grant, a retention
specialist, whose primary focus is to increase the retention rates of students in technical-occupational majors, was hired to work in the CSC. A combination of improvements such as restructuring of class scheduling, hiring a retention specialist, developing and implementing assessments, and a continual revising of the assignments for the courses have resulted in increased completion rates.

Completion rates have been trending upwards for all semesters and summer sessions. For fall semesters, completion rates have increased from a low of 30% in Fall 2000 to a high of 58% in Fall 2004. For spring semesters, completion rates increased from a low of 28% in Spring 2000 to 60% in Spring 2005. Finally, summer session completion rates increased from a low of 64% in Summer 2000 to 83% in Summer 2004.

It has been noted that on the student profile survey administered each semester, even though the percentage of students who declare that they have a disability has increased from 24% in Spring 2002 to 30% in the Fall 2004 and Spring 2005 semesters, the overall ENG 20E completion rates for the courses have been increasing over these semesters.

Compared to completion rates in other English courses on campus, English 20E is generally lower, but this may be due to English 20E having no minimum placement score or lower-level course requirements.

<table>
<thead>
<tr>
<th>Completion Rates for HCC English Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grades Included</strong></td>
</tr>
<tr>
<td>English 20BCDE</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>English 22</td>
</tr>
<tr>
<td>English 51</td>
</tr>
<tr>
<td>English 60</td>
</tr>
<tr>
<td>English 100</td>
</tr>
</tbody>
</table>

In Fall 2004, comparisons were made between equivalent basic English courses cross three major Oahu campuses.

<table>
<thead>
<tr>
<th>Pass Rate (CR or Grades A – C) and Number Enrolled in Fall 2004</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HonCC</strong></td>
</tr>
<tr>
<td>ENG 20BCDE, PCC 20 or equivalent</td>
</tr>
<tr>
<td># enrolled</td>
</tr>
<tr>
<td>ENG 22</td>
</tr>
<tr>
<td># enrolled</td>
</tr>
<tr>
<td>ENG 100</td>
</tr>
<tr>
<td># enrolled</td>
</tr>
</tbody>
</table>
Of note, ENG 20BCDE course enrollment is over two times the enrollment at the other two community colleges, which offer for comparable non-credit courses at a higher cost to students.

Knowledge Survey

Prior to the start of the Fall 2005 semester, faculty teaching the English 20BCDE courses attended a workshop presenting the incorporation of the knowledge survey to assess student learning outcomes. As a result, a sample knowledge survey will be tested for English 20D in Fall 2005, and full implementation will begin in Spring 2006.

Course Outcome and Objectives for Eng 20BCDE
The two full-time faculty members for the English 20 BCDE courses have developed the course outcome and performance objectives with measures for each objective.

- **Course Outcome**
  Students demonstrate skills required to meet all student learning outcomes in ENG 20BCDE in one semester.

- **Performance Objective #1**
  - Students will provide input via a mid-term survey on the learning environment and rate each item on the learning environment at 4.0 or higher.
  - If the rating falls below 4.0, an analysis will be conducted to determine changes needed to improve the situation.
  - Measures: student satisfaction survey of learning environment.

Student satisfaction surveys were administered in English 20BCDE classes for three semesters (Fall 2004, Spring 2005, Fall 2005).

**English 20BCDE Satisfaction Survey Summary**

Administered at mid-semester

5 = very satisfied   1 = very dissatisfied

<table>
<thead>
<tr>
<th></th>
<th>Fall 2004</th>
<th>Spring 2005</th>
<th>Fall 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air-conditioning in lab</td>
<td>3.625</td>
<td>4.475</td>
<td>4.27</td>
</tr>
<tr>
<td>Space in lab</td>
<td>3.170</td>
<td>4.195</td>
<td>3.69</td>
</tr>
<tr>
<td>Quietness in testing room</td>
<td>4.081</td>
<td>4.390</td>
<td>4.46</td>
</tr>
<tr>
<td>Physical environment of lab</td>
<td>4.415</td>
<td></td>
<td>3.81</td>
</tr>
</tbody>
</table>
For Fall 2004, using a score of 1 for “very dissatisfied” to 5 for “very satisfied,” the lowest average was 2.985 for “Space in classroom.” The next lowest score was for “Space in lab.” Previously, English 20BCDE classes were held in a computer lab with 30 students seated at 18 computers and study tables, creating a very crowded situation. To address student concerns of space issues, additional space was acquired during the summer so that Math 20BCD classes are now being held on the fourth floor, and this opened up a classroom for English 20BCDE classes. For the Fall 2005 semester, students received their lectures in a classroom and proceeded to the computer lab next to the classroom to continue with their assignments. The space for English 20BCDE has expanded by one classroom and has resulted in students spending more time in the computer lab and classroom, thereby allowing more space for them and for the Math 20BCD students who utilize the large open lab which in past semesters has been overcrowded. Subsequent to the change in room, the satisfaction level for the same survey item, “Space in classroom,” increased from a low of 2.85 in Fall 2004 to 4.5 in Fall 2005.

In Spring 2005, “Functioning of computers” received the lowest score at 3.902 among all items. In addition, some of the comments from students included:
- Provide more upgraded computers (3 students)
- More computers (2 students)
- Fix some computers (2 students)
- Better computer software

In addition, a focus group session, conducted on April 12, 2005, by the College’s Self-Study committee evaluating the College Skills Center, also indicate that computers need upgrading. Comments by the students in the focus group included the following:

<table>
<thead>
<tr>
<th>Service Provided</th>
<th>Fall 2004</th>
<th>Spring 2005</th>
<th>Fall 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of computers</td>
<td>3.585</td>
<td>4.463</td>
<td>3.55</td>
</tr>
<tr>
<td>Functioning of computers</td>
<td>3.382</td>
<td>3.902</td>
<td>3.27</td>
</tr>
<tr>
<td>Word processing software</td>
<td>3.597</td>
<td>4.220</td>
<td>3.49</td>
</tr>
<tr>
<td>Service by tutors in timely manner</td>
<td>3.644</td>
<td>4.537</td>
<td>4.21</td>
</tr>
<tr>
<td>Skill level of tutors</td>
<td></td>
<td>4.463</td>
<td>4.38</td>
</tr>
<tr>
<td>Attitude of tutors</td>
<td>4.220</td>
<td></td>
<td>4.27</td>
</tr>
<tr>
<td>Behavior of other students in lab</td>
<td></td>
<td>4.317</td>
<td>3.92</td>
</tr>
<tr>
<td>Space in classroom</td>
<td>2.985</td>
<td></td>
<td>4.15</td>
</tr>
<tr>
<td>Quietness in lab</td>
<td></td>
<td>3.485</td>
<td></td>
</tr>
<tr>
<td>Satisfaction of service by tutors</td>
<td>3.780</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The computers...are always freezing.
- Need new updated computers.
- Better computers – at least 50.

The computers indicate that all of them have the same specifications (Win 2000, PIII 400 MHz, 9.53 GB hard drive) and are dated 1998-2000. These computers all fell far short of the recommended specifications from the College’s Information Technology Center. Computer problems are now being recorded. Data on computers is being compiled to verify the need for replacements.

- Performance Objective #2
  - 75% of students who complete ENG 20BCDE classes will earn credit in their next English class.
    - If the measure is below 75%, the ENG 20BCDE courses will be reviewed to determine if any changes should be made.
  - Measures: Completion rates of ENG 20BCDE completers at the next English course.

Data received from the college show that of students who completed English 20E in Fall 2002, 83% of those that enrolled in an English 22, 51 or 60 course completed their next English course. In the following Fall 2003 and 2004 semesters, 76% and 80% of the students, respectively, completed their next English course. The goal of 75% was reached for Fall semester students. However, spring semester students did not fair as well. In Spring 2003, the completion rate was 60%, and in Spring 2004, the completion rate was 71%. Analysis of other data will be conducted to determine why there is a discrepancy between the semesters.

E. Curriculum Revision and Review – English 20BCDE

In Spring 2004, entry-level English courses were changed from an independent lab format to a combination class and lab format to facilitate ease of online registration which was implemented in Summer 2002. The change in course delivery was approved by the Committee on Programs and Curricula and entailed having classes scheduled with a combination lecture-lab format at 3 hours twice a week for English 20BCDE. In the previous format, faculty could be assigned 50 students to a class which resulted in a difficult learning situation for students. Under the current scheduled format, classes are now limited to 30 students, and lecturers are hired as needed to increase sections beyond the credit load for faculty.

Review of the change in format for English 20BCDE courses indicates that there is an increase in completion rates.
F. Analysis – English 20BCDE

Alignment with mission
English 20BCDE aligns with HCC’s Mission and CSC’s mission by offering affordable learning-centered credit courses with a flexible offering of day and evening classes and lecture-lab format delivery system to develop responsible, self-directed learners.

Evidence of quality student learning
Despite an increase in the percent of students with disabilities in classes, overall course completion rates have increased and completion rates of English 20BCDE completers at the next level of English have been at a respectable rate (76%, 80%).

Recommendations
Based on student satisfaction surveys and focus group responses, student computers need to be upgraded. The average age of computers for student use is 7 years old. A log of computer problems in Fall 2005 show numerous problems such as “wouldn’t start,” “froze,” and “disk drive malfunction.” In addition, student satisfaction surveys rank the “functioning of computers” at the lowest of the items to evaluate. To maintain these computers, qualified technical support personnel is needed to maintain current computers and prepare new computers for operation in the CSC.

G. Action Plan – English 20BCDE

1 – Purchase new computers (This item has been included in the college’s strategic plan.).
2 – Hire a technical support specialist (This item has been included in the college’s strategic plan.).
3 – Implement Knowledge Survey.
4 – Learn strategies to better serve students with disabilities.

H. Budget Implications – English 20BCDE

New Student Computers (20 computers at $1300 each = $26,000)
Technical Support Specialist – ($33,888)
V. Math 20BCDE

A. History

Initially developed as an open-entry open-exit courses, Math 20BCD are entry-level credit courses taught by full-time faculty and lecturers. Each module, Math 20B, 20C, and 20D is a one-credit course and is taken as a series of courses. Math 20BCD meets for approximately two and a half hours twice a week. Students initially register for the complete series of courses. If students do not complete a module, they may retake the remaining module the next semester. Students are not allowed to take each course more than twice. Students are serviced by the instructor, student assistants, and educational specialist. Packets of assignments created by Math 20BCD faculty are reviewed each year and updated during the summer. The instructors and lecturers utilize the same packet for all classes. The sale of these packets generates revenue to support the cost of tutor services to our students. Each year, Math 20BCD classes serve approximately 700 students.

B. Student Learning Outcomes – Math 20BCD

Math 20B

Upon successful completion of Math 20B, the student should be able to:

- **Common Fractions**
  - Understand and compare sizes of fractions.
  - Simplify Common Fractions
  - Rename fractions and mixed numbers.
  - Find common denominators.
  - Convert mixed numbers to improper fractions.
  - Convert improper fractions to mixed numbers.
  - Convert common fractions to decimals.
  - Add, subtract, multiply and divide common fractions and mixed numbers.

- **Decimal Fractions**
  - Read and write decimal numbers.
  - Determine the comparative size of decimal numbers.
  - Add, subtract, multiply and divide decimal numbers.
  - Round decimal numbers to indicated place values.
Make estimations involving decimal numbers.
Solve problems using decimal numbers.

Math 20C
Upon successful completion of Math 20B, the student should be able to:
  Signed Numbers
  Determine the relative values of signed numbers and plot their positions on a
  number line.
  Find the absolute value of signed numbers.
  Add, subtract, multiply, and divide using signed numbers.
  Solve word problems involving signed numbers
  Calculator Skills
  Enter whole numbers, common fractions, mixed numbers and decimal fractions
  into a scientific calculator and then read what is displayed.
  Add, subtract, multiply and divide whole numbers, common fractions, mixed
  numbers and decimal fractions with a scientific calculator.
  Use the square root, exponent, and parentheses keys.
  Use the memory function of a scientific calculator.
  Do multi-step computations with a calculator.
  Simple Algebraic Equations
  Define the basic terminology of algebra.
  Evaluate algebraic expressions.
  Solve simple algebraic equations including the use of the distributive property.
  Solve word problems with one or missing values using algebraic techniques.

Math 20C
Upon successful completion of Math 20B, the student should be able to:
  Percent
  Do conversions involving common fractions, decimal fractions, and percents.
  Become familiar with commonly used fraction/decimal/percent equivalents.
  Use percents to calculate mark-up and mark-down.
  Use percents to calculate simple interest.
  Solve work-related problems that involve percents.
  Ratio and Proportion
  Interpret and simplify ratios.
  Compare ratios.
  Recognize and write proportions from given information.
  Solve work-related problems that involve ratios and/or proportions.
C. Quantitative Indicators – Math 20BCD

Registration Data

<table>
<thead>
<tr>
<th>Math 20BCD</th>
<th>Spr 04</th>
<th>Fall 04</th>
<th>Spr 05</th>
<th>Fall 05</th>
</tr>
</thead>
<tbody>
<tr>
<td># Courses Taught</td>
<td>9</td>
<td>12</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Ave. Class Size</td>
<td>24</td>
<td>31</td>
<td>30</td>
<td>28</td>
</tr>
<tr>
<td>Fill Rate</td>
<td>79%</td>
<td>105%</td>
<td>100%</td>
<td>94%</td>
</tr>
<tr>
<td>Semester Hours</td>
<td>27</td>
<td>36</td>
<td>24</td>
<td>36</td>
</tr>
<tr>
<td>SSH</td>
<td>640</td>
<td>1132</td>
<td>719</td>
<td>1011</td>
</tr>
<tr>
<td>Course FTE</td>
<td>42.7</td>
<td>75.5</td>
<td>47.9</td>
<td>67.4</td>
</tr>
</tbody>
</table>

In Fall 2001 and Spring 2002, Math 20BCD was taught in a lab-format style with tutors, faculty and staff working individually with students who needed help with more difficult math concepts. To better service our students and to increase success and retention, we created mandatory lecture and lab class sessions in Fall 2002. Students signed-up for a class in room 7-313 after registration. In Fall 2004, mandatory class/lab sessions were written up in the schedule of classes.

D. Assessment – Math 20CD

Student Profile

At the beginning of each semester, students in Math 20BCD complete a student profile survey. The survey requests the following information: major, native language, disability, gender, reason in college, educational goal, number of semesters at HCC, ethnicity, marital an military status, parents’ education, current employment, and credit load.

Approximately 68% of the students are technical-occupational majors, and 31% are liberal arts majors. The percentage of students who declared having a learning disability fluctuates each semester.

Percentage of Students with Disabilities in Math 20BCD

<table>
<thead>
<tr>
<th></th>
<th>Spring 02</th>
<th>Fall 02</th>
<th>Spring 03</th>
<th>Fall 03</th>
<th>Spring 04</th>
<th>Fall 04</th>
<th>Spring 05</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>29%</td>
<td>19%</td>
<td>19%</td>
<td>20%</td>
<td>19%</td>
<td>21%</td>
<td>18%</td>
</tr>
</tbody>
</table>
In order to address this population, hands-on assignments are incorporated in the assignments. Math 20 lab also gives students an opportunity to get individual help in understanding math concepts. The disability services provided in the College Skills Center has been invaluable. They provide tape recordings of the exams given to students after each module and appropriate testing accommodations.

Percentage of Students in the Work Force

<table>
<thead>
<tr>
<th></th>
<th>Spring 02</th>
<th>Fall 02</th>
<th>Spring 03</th>
<th>Fall 03</th>
<th>Spring 04</th>
<th>Fall 04</th>
<th>Spring 05</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>25%</td>
<td>25%</td>
<td>26%</td>
<td>26%</td>
<td>27%</td>
<td>30%</td>
<td>36%</td>
</tr>
</tbody>
</table>

According to the survey, the percentage of Math 20BCD students who work increased each semester.

Completion Rates

Student learning outcomes have traditionally been measured using completion rates for Math D. Students must complete Math 20D in order to enter their program major or move on the next Math course.

Enrollment and Completion Rates in Math 20 BCD

<table>
<thead>
<tr>
<th>Semester</th>
<th># of students enrolled</th>
<th>% of completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2001</td>
<td>370</td>
<td>31%</td>
</tr>
<tr>
<td>Fall 2002</td>
<td>374</td>
<td>36%</td>
</tr>
<tr>
<td>Fall 2003</td>
<td>374</td>
<td>39%</td>
</tr>
<tr>
<td>Fall 2004</td>
<td>372</td>
<td>47%</td>
</tr>
<tr>
<td>Semester</td>
<td># of students enrolled</td>
<td>% of completion</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Spring 2001</td>
<td>258</td>
<td>23%</td>
</tr>
<tr>
<td>Spring 2002</td>
<td>275</td>
<td>26%</td>
</tr>
<tr>
<td>Spring 2003</td>
<td>256</td>
<td>41%</td>
</tr>
<tr>
<td>Spring 2004</td>
<td>225</td>
<td>42%</td>
</tr>
<tr>
<td>Spring 2005</td>
<td>246</td>
<td>50%</td>
</tr>
</tbody>
</table>

**Math 20 Spring**

![Graph showing the percentage of completion for Math 20 Spring from Spring 2001 to Spring 2005. The percentage of completion increases each year.]
Enrollment and completion data have been separated by semesters since the numbers can be more accurately compared since the demand for courses vary between semesters.

Over the past five years, the enrollment for fall semester classes averaged 379 students, spring semester classes averaged 264 students, and summer session classes averaged 87 students. Class enrollments by semesters started relatively high in 2000 and then has remained relatively stable over the remaining semesters.

Completion rates have been trending upwards for all semesters and the summer session. Completion rates have increased to a high of 47% in Fall 2004 compared to a low of 31% in Fall 2001. For Spring 2005, the completion rate was 50% compared to a low of 23% in Spring 2001. Finally, for Summer 2004, the completion rate was 78% compared to a low of 50% in summer 2002.

It has been noted that on a student profile survey administered each semester, about 19% of the students declare that they have a disability which may contribute to a lower completion rate for all classes.
Knowledge Survey

Prior to the start of the Fall 2005 semester, faculty teaching the Math 20BCD courses attended a workshop incorporating a knowledge survey to assess student learning outcomes. As a result a sample knowledge survey was given to Math 20BCD students in fall 2005. Full implementation will begin in Spring 2006.

The two full-time Math 20BCD faculties have developed the course outcome and performance objectives with measures for each objective.

Course Outcome and Objectives for Math 20BCD
Students demonstrate skills required to meet all student learning outcomes in Math 20BCD.

Performance Objectives

- Students will provide input via a mid-term survey on the learning environment and rate each item on the learning environment at 4.0 or higher.
  - If the rating falls below 4.0, an analysis will be conducted to determine changes needed to improve the situation.
  - Measures: student satisfaction survey of learning environment.

Student satisfaction surveys were administered in Math 20 BCD classes for two semesters (Spring 2005, Fall 2005).

Math 20 BCD Satisfaction Survey of Learning Environment

<table>
<thead>
<tr>
<th>Math 20 BCD Satisfaction Survey Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring 2005  (87 students)</td>
</tr>
<tr>
<td>Administered at mid-semester</td>
</tr>
<tr>
<td>5 = very satisfied  1 = very dissatisfied</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air-conditioning in lab</td>
<td>4.301</td>
</tr>
<tr>
<td>Space in lab</td>
<td>4.118</td>
</tr>
<tr>
<td>Quietness in testing room</td>
<td>4.208</td>
</tr>
<tr>
<td>Physical environment of lab</td>
<td>4.217</td>
</tr>
<tr>
<td>Availability of materials in lab</td>
<td>4.253</td>
</tr>
<tr>
<td>Service by tutors in timely manner</td>
<td>4.181</td>
</tr>
<tr>
<td>Skill level of tutors</td>
<td>4.337</td>
</tr>
<tr>
<td>Attitude of tutors</td>
<td>4.11</td>
</tr>
<tr>
<td>Behavior of other students in lab</td>
<td>3.978</td>
</tr>
</tbody>
</table>
In Spring 2005 the lowest average was 3.978 for “behavior of other students in lab.” The next lowest score was for “attitude of tutors.” The issue of student behavior is addressed during orientation on the first day of class each semester. We discuss and/or give students the sexual harassment pamphlet and talk about how to properly conduct themselves in the math lab. Before each semester a training session is conducted for all math tutors. The session is used to discuss about problems encountered the previous semester and how to address them. We also use this time to go over new problems or to work with new hands-on materials.

Before we administered the satisfaction survey for Fall 2005, the questions were revised to better reflect data we wanted to collect and to make the questions easier to comprehend. The following data reflects those changes.

<table>
<thead>
<tr>
<th>Math 20 BCD Satisfaction Survey Summary</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2005</td>
<td></td>
</tr>
<tr>
<td>Administered at mid-semester</td>
<td></td>
</tr>
<tr>
<td>5 = very satisfied  1 = very dissatisfied</td>
<td></td>
</tr>
<tr>
<td>Air-conditioning in lab</td>
<td>3.571</td>
</tr>
<tr>
<td>Space in lab</td>
<td>3.099</td>
</tr>
<tr>
<td>Space in classroom</td>
<td>3.344</td>
</tr>
<tr>
<td>Quietness in lab</td>
<td>3.429</td>
</tr>
<tr>
<td>Quietness in Testing Room</td>
<td>4.121</td>
</tr>
<tr>
<td>Availability of hands-on materials</td>
<td>3.598</td>
</tr>
<tr>
<td>Service by tutors in a timely manner</td>
<td>3.573</td>
</tr>
<tr>
<td>Attitude of tutors</td>
<td>4.11</td>
</tr>
<tr>
<td>Behavior of other students in lab</td>
<td>3.978</td>
</tr>
</tbody>
</table>

In Fall 2005 the lowest average was 3.099 for “space in lab.” The next lowest score was for “space in classroom.” Previously, Math 20BCD classes were held in room 320. Space was acquired during the summer so that Math 20 classes are now being held on the fourth floor. The satisfaction level for the same survey items, “space in classroom,” and “space in lab” will be given in mid Spring 2006. We will see how these changes impacts students in Math 20BCD.

Performance Objective
- 75% of students who complete Math 20BCD classes will earn credit in their next Math class.
• If the measure is below 75%, the Math 20BCD courses will be reviewed to
determine if any changes should be made.
• Measures: Completion rates of Math 20BCD completers at the next Math
course.

Data show that of students who completed Math 20 in Fall 2002, 83% of those that
enrolled in Math 24, 50, or 53 course completed their next Math course. In Fall 2003 and
2004 semesters, 73% and 64% of the students, respectively, completed their next Math
course. The goal of 75% was not reached for two consecutive semesters. However,
spring semester students did not do as well. In spring 2002, 2003, and 2004 semesters,
72%, 52%, and 56% of the students, respectively, completed their next Math course. The
goal of 75% was almost reached for Fall semesters, but more analysis of other data will
be conducted to improve the percentage and determine the discrepancy between
semesters.

Goals

1. Equip students with the foundation in math and problem solving skills that allows
   them to enter their Technical-Occupational or Liberal Arts programs.
2. Provides opportunity for students already enrolled in their programs to strengthen
   ability in areas of need.
3. Allows community members to improve their math skills for personal reasons.
4. Provide developmental instruction to building skills necessary to pursue
   educational objectives.
5. Ensure general competency in basic skills and problem-solving

Program Data

Measures of SLOs

1. Surveys
2. Attendance Record
3. Academic records in Banner through institutional research personnel
4. Locally produced test
5. Assignments

Measures of Effectiveness

According to the data gathered, the number of students who successfully completed
Math 20BCD steadily increased each semester. The Math 20BCD lab held directly after
the lectures help students to process and apply what was learned in class. Students
having difficulty with math concepts are tutored by student assistances, faculty, or staff
during lab. In order to accommodate the different learning styles of our students
manipulatives such as weights and scales are utilized, and math videos are also available.
Measures of Efficiency

1. Number of FTE faculty
   2 full time faculty and 1 full time APT

2. Faculty to student ratio
   1:30

E. Curriculum Review and Revision

In the spring semester of 2004 the format for the Math 20BCD courses was changed from an independent lab format, listed in the schedule of classes as “TBA,” to a scheduled lecture/lab format, listed with specific start and end times in the schedule of classes. This was done to facilitate ease of registration, which went to an online method in the summer of 2002, as well as to provide students with a scheduled lab time to increase retention and completion. The changes in the courses was approved by the Committee on Programs and Curricula and created a lecture/lab class that met twice a week for 2 ½ hours. In the previous format, faculty could be assigned 50 or more students in a single class which resulted in a difficult learning situation for students. Also, the students were responsible for coming in on their own time to do assignments in the lab. This resulted in many students leaving much of their assignments undone until later in the semester when the amount of work became insurmountable. Under the current scheduled format, classes are now limited to 30 students, and lecturers are hired as needed to increase sections beyond the maximum credit load for faculty. The scheduled lab times also required students to spend quality time after class completing assignments.

Review and revision of the text and assignments is done each academic year to address the needs of the students and changes in the curriculum in the Math Department.

F. Analysis

Math 20BCD’s mission aligns with the campus’s mission in serving the community as a learner centered, open-door program. Math 20 curriculum and SLO’s are revised annually to meet the needs of the students and programs.

Students enrolled in Math 20BCD are recent high school graduates, adults looking for entry-level work positions in the work force, or adults returning to school after many years. Many of our students work part-time and are full-time students. Despite an increase in the percent of students with disabilities in classes, overall course completion rates have increased.

Math 20’s student learning outcomes are adequately measured through assignments and exams with a passing rate of 70% or more. An increase in students passing rate could
result by providing tutoring services for students at the next math level and to continue addressing the needs of students with learning disabilities.

G. Action Plan

1 – Improve tutor training sessions.
2 – Implement Knowledge Survey.
3 – Accommodate different learning styles and be aware of students with learning disabilities and how to help them achieve their goals.

H. Budget Implications - None
VI. Summary of Action Plans

Testing Services
- Purchase and install computers in testing room.
- Hire a computer technical support specialist.

Services for Students with Disabilities
- Mail SSD procedures to returning students earlier.
- Specify timelines for accommodation requests in web and brochure information.
- Conduct course evaluations at the end of the first quarter.
- Develop college disability policy handbook.
- Advocate for campus-wide disability response fund to be included in strategic plan.
- Study feasibility of mentoring/tutoring services for possible inclusion in strategic plan.

English 20BCDE
- Purchase new computers.
- Hire a technical support specialist.
- Implement Knowledge Survey.
- Learn strategies to better serve students with disabilities.

Math 20BCD
- Improve tutor training sessions.
- Implement Knowledge Survey.
- Accommodate different learning styles and be aware of students with learning disabilities and how to help them achieve their goals.
VII. Summary of Budget Implications

- Purchase computers for testing room (Testing Services and English 20BCDE) - $30,000.
- Hire a computer technical support specialist (Testing Services and English 20BCDE - $33,888.
- Printing of disability policy handbook (Disability Services) – To be determined.