

**LEARNING OUTCOMES
ASSESSMENT
ANNUAL REPORT**

MAY 2006

COMPILED BY: ROSE MINCE

LEARNING OUTCOMES ASSESSMENT
ANNUAL REPORT

EXECUTIVE SUMMARY

PREPARED BY:
ROSE MINCE

MAY 2006

OVERVIEW

It has been a banner year for Learning Outcomes Assessment at CCBC, with the highlight of the year being the selection of CCBC as one of only four colleges in the United States, and the only community college, as a winner of the Council for Higher Education Accreditation's (CHEA) Award for Institutional Progress in Student Learning Outcomes. CHEA is a national advocate and institutional voice for self-regulation of academic quality through accreditation. It is an association of 3,000 degree-granting colleges and universities and recognizes 60 institutional and programmatic accrediting organizations. As stated in the award letter, CHEA congratulates CCBC on its success in developing and applying evidence of student learning outcomes as part of its ongoing evaluation and improvement of college and university programs of study. The CHEA applications were reviewed and evaluated by an award committee of individuals from higher education institutions, accrediting organizations, and the public. The committee was impressed with the high quality of the entire applicant pool and the work on student learning outcomes underway throughout the country. This is the first year of the CHEA Award program, and it was a high and special honor to be recognized as an inaugural winner.

A second notable recognition, a national exemplary practice award from the National Council on Student Development (an affiliate of the American Association of Community Colleges), was achieved this year by the Maryland State Deans of Students. This best practice and three others will be evaluated in October, and one will be granted the Terry O'Banion Shared Journey Award. CCBC has been a leader in the development and implementation of the statewide Student Services Learning Outcomes Assessment project that connects Student Services Affinity Groups in areas such as advising, athletics, and tutoring. This project implements assessment projects that demonstrate how these service areas support and enhance student learning. Maryland is among the first states in the country to undertake a project of this scope and magnitude, and the commitment to student success and the leadership of the deans and professionals from colleges across the state have brought positive, national attention to our assessment program at CCBC.

There are several key individuals who devote incredible amounts of time and energy to supporting faculty and staff through the five stages of assessment projects at CCBC. Their leadership is invaluable and should be recognized. **Lynne Mason** and **Cynthia Roberts** have volunteered their services as the co-chairs of the Learning Outcomes Assessment Advisory Board since 2002. This college wide steering committee provides oversight and direction for all of the college's assessment initiatives and keeps communication flowing between and among the

people involved in assessment projects at the course, program, and institutional levels. Next, **Tara Ebersole**, CCBC's Outcomes Associate, is the person who assists faculty with all of the individual and high impact course-level projects. Tara is a sought-after consultant in the area of assessment and is the College's resident expert in the latest assessment research as she combines her interest in assessment with her doctoral studies and keeps CCBC abreast of what is happening throughout the state of Maryland and across the country. **Paulette Comet** is CCBC's General Education Assessment Teams (GREAT) Coordinator. Paulette provides structure and guidance for faculty participating in GREAT Projects and works closely with the office of Planning, Research, and Evaluation to collect and analyze meaningful program-level data to improve our General Education Program. Assistance to Program Coordinators undergoing Program Review is provided by **Rose Mince**. CCBC has made significant progress in assessing student learning outcomes at the program level over the past two years. Finally, leadership for assessment projects in the Student Services and Enrollment Management arena is provided by **Cindy Peterka**. Cindy helps coordinate 10 different projects that bring together staff from all three campuses as well as professionals from all of the other Maryland community colleges.

None of CCBC's assessment projects would be successful in improving student learning without support and assistance from the Planning, Research, and Evaluation (PRE) Office. This past year the following PRE staff members played a key role in at least one major assessment initiative: Dan McConochie, Natasha Miller, Debra Baker, Nora Bye, and Terry Hirsch. These research experts are essential members of the College's assessment team. They spend endless hours preparing data collection sheets, scanning and analyzing data, and meeting with faculty and staff to help make sense of what the numbers show. In addition, these individuals display endless patience with colleagues who are not as well-versed in research and statistics as they are. They often collate and/or disaggregate data over and over again to help determine what is going on and what might be done to make positive differences in students' lives.

All of the above-mentioned individuals and many more skilled people contributed to this annual report. Following this executive summary, in the full report, is a section outlining the specific accomplishments in these areas: the Learning Outcomes Assessment Advisory Board, Course-level Projects, General Education Program Assessment, Program Review, Student Services Projects, and Institutional Outcomes Assessment Projects. All of these projects combined provide the full picture of what is happening in assessment across the college.

The Learning Outcomes Assessment Advisory Board (LOAAB) holds an annual Assessment Appreciation Day to recognize and thank the faculty, administrators, and staff who have been involved with assessment projects during the past year. On May 22, 2006, 70 individuals were thanked for serving as leaders of assessment projects. That number does not begin to represent all of the people who helped design a project, collect the data, review the data, make recommendations for curricular and/or administrative changes, or write the reports that document student achievement. It also does not include all of the members of the Learning Outcomes Assessment Advisory Board, the research office, or the deans who provided resources and support. The English 102 GREAT Project alone included 70 faculty members. Hundreds of people are now involved in student learning outcomes assessment projects, and their work is impacting thousands of students each year. As more people become involved, we continue to learn from each other and tighten and revise our policies and procedures to streamline the work

that must be done and use of knowledge and data to best effect. By working together on the Advisory Board, we have been able to determine trends in student learning that cut across disciplines and levels. Lessons that we learn from one project are often valuable to another project. Interventions put in place to improve one area overflow to help another area. The motto from The New England Council that president John F. Kennedy was fond of quoting, “The rising tide lifts all the boats,” seems an appropriate analogy.

One reason why we have achieved the success that we have is that we began with a faculty-developed framework that requires all projects to follow the same five-stage process. Critical among those stages is the intervention stage where we identify what changes will be implemented to try to improve student learning. Many colleges consider their assessment projects completed once they have collected their data, what we consider stage 2. At CCBC, data analysis is the point at which the projects are really just getting going and starting to provide meaningful information. We do not stop once we know what is going on; instead, our faculty and staff are committed to doing what is best for students. They determine what they can do in the classroom, on the athletic fields, and in advising offices to help students develop the skills to be successful, self-directed learners. There is always more work to be done to help our students become more engaged partners in their learning, but we are making significant strides. Below is a brief summary of the work that has been done in each of the six major assessment areas this past year.

LEARNING OUTCOMES ASSESSMENT ADVISORY BOARD

LOAAB created an Assessment Community on the college’s intra-office communication tool, the InnerLoop, to provide information and an additional means of communication for its members and the entire college community. This new tool, along with the expanded LOAAB web pages, is a key way for people to tune into what is going on in assessment, get a copy of executive summaries of completed reports, and find out how to get help with an assessment project. Members of LOAAB also developed an Assessment Survey to garner feedback regarding both the formal types of assessment activities in which people are involved as well as the more informal types of activities that they conduct for their own personal enrichment, such as graduate coursework research, classroom assessment techniques, and classroom-level research. One purpose of this survey is to help faculty appreciate that most people are doing some type of assessment every semester, and that assessment is an integral, universal, and timeless activity that all good teachers use.

COURSE-LEVEL LEARNING OUTCOMES ASSESSMENT

Approximately 20 high impact course-level projects are currently underway at CCBC. These projects are called high impact because they involve high enrollment, multi-section, multi-campus courses, and thus have the potential to make a significant positive impact on student learning. The huge scope of these projects also means that a large number of faculty must work together to design and implement a valid and reliable project. CCBC is currently in its seventh year of faculty-designed course-level assessment projects. Many pilot projects, several individual course projects, and five high impact projects have been completed over the years. As of May, 2006, there were 4 high impact projects in stage 1, 4 in stage 2, 3 in stage 3, 5 in stage 4,

and 2 in stage 5, which means that when the final report is submitted, two more projects will be completed.

GENERAL EDUCATION PROGRAM OUTCOMES ASSESSMENT

The purpose of the General Education Assessment Teams (GREAT) Project is to implement Common Graded Assignments and accompanying scoring rubrics to gather data to assess the six General Education Program goals. The assignments and rubrics are designed by faculty teams, and focus on communication, critical thinking, using technology as a learning tool, cultural appreciation, independent learning skills, and discipline-based content knowledge, and/or skills. The third full implementation of the GREAT Project took place in fall 2005, with faculty from 26 different Biological and Physical Sciences courses participating. The entire faculty who teach ENGL 102, College Composition II, participated in spring 2006. Twenty courses in the Arts and Humanities category are slated for participation in fall 2006.

STUDENT SERVICES AND ENROLLMENT MANAGEMENT

This was the first year of implementation for 10 high impact projects in the area of Student Services and Enrollment Management. These projects are designed to measure the degree to which students are improving as self-directed, independent learners in the following areas: Academic Advising, Admissions, Records and Registration, Athletics, Financial Aid, Student Life, Testing Centers, and Tutoring. These projects will help demonstrate the important impact of enrollment and support services on student learning, both inside and outside of the classroom. One long-term outcome of this statewide project will be the identification and adoption of best practices that have been clearly linked to student success indicators such as increased GPAs, retention, and course completion rates.

PROGRAM-LEVEL LEARNING OUTCOMES ASSESSMENT

Program outcomes assessment became a mandatory component of the Program Review Process in 2005. Each Program Coordinator begins the assessment project by identifying three to five measurable outcomes that students should achieve upon completion of the program. The Program Coordinator then decides if a Program Outcomes Assessment Project, designed to measure those outcomes, or a Core Competencies Assessment Project, designed to measure communication, problem-solving, global perspective and social responsibility, and independent learning and personal management will be more valuable. Of the eight programs that participated in Program Review during 2005-06, two selected the Core Competencies option, and the others selected the program exit competencies option. Since it takes multiple semesters for these projects to be completed, the full assessment project plan, along with data collected to date, is included in the Program Review report, with remaining data and information to be submitted as an addendum when the assessment project is completed.

INSTITUTION-LEVEL OUTCOMES ASSESSMENT

In addition to providing support for all of the college's learning outcomes assessment projects, the Planning, Research, and Evaluation Office is involved in the evaluation of institutional effectiveness at CCBC. Evaluation of institutional effectiveness includes a systematic approach to providing information for evaluating the college's progress in meeting its strategic goals and for evaluating improvement in key processes at the CCBC. Reports and indicators are provided throughout the year to support decision-making at the management and policy levels, to promote continuous improvement of CCBC's programs and services, and to monitor progress toward benchmarks that are set at the college and unit levels. While many of these studies and indicators measure student success such as trends in degree attainment, transfer to four year colleges, retention, and successful course completion, other indicators focus on evaluation of the processes that support that student success. Also included in these measures of institutional effectiveness are indicators of how the college is moving toward its goals in enrollment, organizational excellence, embracing cultural diversity, improving internal communications, creating a learning college, and also how well it is meeting its obligations to contribute to its community and promote the economic, social, and workforce development of the region.

SUMMARY

The complete Learning Outcomes Assessment Annual Report includes a full description of all of the above-mentioned initiatives, along with the data that has been collected this year for course, program, and institutional assessment projects. The assessment leaders work together as team to provide college wide review and approval of projects before they are undertaken and again once data have been collected to determine what interventions will be most effective to improve student learning.

LEARNING OUTCOMES ASSESSMENT ADVISORY BOARD

PREPARED BY:
CYNTHIA ROBERTS AND LYNNE MASON

MAY 2006

OVERVIEW

The major accomplishments of the Learning Outcomes Assessment Advisory Board (LOAAB) for the academic year 2005-2006 focus on assessment affinity groups, communication of assessment-related information, and assessment surveys.

ASSESSMENT AFFINITY GROUPS

With CCBC's assessment projects spanning institutional, instructional, and program areas and widening into other arenas such as Learning and Student Development and Information Literacy, the Learning Outcomes Assessment Advisory Board developed an initiative this year called Assessment Affinity Groups, the purpose of which is to promote inter-project, inter-faculty, and inter-campus assessment conversations. The goal of this project is to arrange people in existing assessment silos such as GREATs, program level projects, and course level projects into affinity groups defined by the stage of their project. These four stages are identified as:

1. Emerging (those in the pipeline for assessment)
2. Design
3. Analysis/Interpretation
4. Intervention

Each group will be facilitated by a LOAAB member and will meet once in the fall and once in the spring. Planning, Research, and Evaluation will be represented on each of the first three groups. The ultimate goal of this project is to develop a "faculty mentoring faculty" support system and then expand that to an online assessment support service.

ASSESSMENT COMMUNITY

LOAAB created an Assessment Community on the college's intra-office communication tool, the InnerLoop. Paulette Comet will oversee this project and will generate discussion on a variety of assessment topics.

PROGRAM ASSESSMENT

Program assessment became a mandatory component of the program review process with the 2005-2006 cohort. Faculty were offered two projects from which to choose. The Program Outcomes Assessment Project (POAP) allows faculty to design an assessment plan based on

major program outcomes to determine if students exiting the program have met the program goals. This plan would require external validation, which could include such things as feedback from the program advisory board, pass rate on a certification exam, or collaboration with another institution. The Core Competencies project, which was piloted through LOAAB last year, allows faculty to conduct an in-depth examination of Common Course Outlines for all an identified group of key courses in the program to determine the extent to which CCBC's four core competencies of communication, problem solving, global perspective, and self-directed learning are present in the curriculum.

DALLAS COUNTY COMMUNITY COLLEGE PRESENTATION

At the request of the chief academic officer, CCBC made a comprehensive learning outcomes assessment presentation to representatives from the Dallas County Community College (DCCC). DCCC is a very large multi-campus community college and is in the process of designing a college-wide assessment plan. LOAAB participated in this two-day workshop.

LEARNING OUTCOMES ASSESSMENT SURVEY

LOAAB developed a survey to begin to catalog the types of assessment activities, both formal and informal, in which people are engaged at CCBC. The purpose of this survey is to plan and budget for ways LOAAB can assist people with upcoming assessment projects and to determine staff development needs. The survey was initially distributed to all faculty and to administrative areas within the college that are currently involved in assessment. The return rate was low, so the survey will continue to be distributed next year until sufficient data is collected to inform training and budgetary planning.

INFORMATION LITERACY SURVEY

The CCBC Libraries Information Literacy Team in coordination with PRE conducted a self-reporting survey for students and faculty to determine their perceptions of students' knowledge, skills, and abilities related to information literacy and to measure the use of information literacy components by faculty and students. The survey consisted of three main questions with multiple part answers. The survey was administered to a random sampling of classes—some classes had received library instruction, but most had not.

Fifty-four faculty surveys were returned and 787 student surveys were returned. Analysis of the resultant data indicated that students are being taught at least some of the skills, but overall the College is only reaching about half of its students. Increased collaboration between faculty and librarians will result in a more focused and systematic approach to information literacy—able to make a strong impact on student learning.

LOAAB WEBSITE

The LOAAB web pages were expanded this year to include members list, meeting agendas, meeting minutes, CCBC Core Competencies, and additional program assessment information. A small committee of LOAAB will continue to build the web site to provide the college

community with up-to-date information about all assessment activities under the review of LOAAB.

ASSESSMENT LEADERS MEETING WITH CHANCELLOR SANDRA KURTINITIS

The co-chairs of LOAAB, in addition to other assessment leaders met with CCBC's new Chancellor, Dr. Sandra Kurtinitis, on January 11, 2006, to provide an historical overview of assessment activities here at CCBC. Components of the LOAAB presentation included: the history of LOAAB, the Assessment Infusion Plan, early projects, the Core Competencies, information literacy, program outcomes assessment staff development, learning outcomes assessment intervention project, the affinity group project, and Assessment Appreciation Day. Additional resource material was included in the assessment binder presented to the new Chancellor for her perusal.

FUTURE PROJECTS

In the coming year, LOAAB is looking to focus effort on the following projects: updating the Guide for Learning Outcomes Assessment booklet, formal facilitation of Affinity Groups by LOAAB members, implementation of the InnerLoop Assessment Community, analysis of CCSSE and FSSE results, and formation of the Information Literacy Task Force and pilot assessment projects for information literacy.

**LEARNING OUTCOMES ASSESSMENT SURVEY
SPRING 2006**

Name: _____

Department: _____

The Learning Outcomes Assessment Advisory Board (LOAAB) is conducting this survey in an effort to catalog the types of formal and informal assessment activities that people are engaged in at CCBC and to showcase the many ways in which assessment occurs. This information will also assist us as we plan and budget for ways we can assist people with upcoming assessment projects and help us determine whether there is a need to plan staff development workshops in 06-07. ***Please complete this survey and return to Lynne Mason, Catonsville Campus, Room E-101, by Friday, April 28.***

Please indicate the types of formal assessment activities that you have been involved in this past year at CCBC. Check all that apply:

- High Impact (multi-campus, multi-section, high enrollment) Course-level Project
- Course-level Project
- GREAT (General Education Assessment Team) Project
- Core Competencies Assessment Project
- Program Outcomes Assessment Project
- Student Services Outcomes Assessment Project
- Assessment Projects related to Program Accreditation
- Assessment Projects related to a Grant
- Other: _____
- None

Briefly describe the project(s) and your level of involvement:

Please indicate the types of informal assessment activities that you have been involved this past year. Check all that apply:

- Dissertation Research
- Graduate Coursework Research
- Classroom Assessment Techniques (One Minute Paper, etc.)
- Classroom-level Research/Assessment
- Other: _____
- None

Briefly describe the project and your level of involvement:

How have the results of these assessment activities impacted what you are doing in the classroom/your daily activities? What has been the impact of your interventions on student learning?

Do you anticipate becoming involved in any formal or informal assessment activities during the 06-07 academic year?

- Yes No

If yes, briefly describe _____

Did you know that the CCBC LOA web page includes information about the following? (Check all that apply.)

- LOA definition, mission, philosophy, policies, and procedures (CCBC booklet “Guide to Learning Outcomes Assessment and Classroom Assessment Techniques”)
- CCBC’s Core Competencies
- General Education Assessment
- Program Assessment
- Executive Summaries of completed LOA projects
- Suggestions for possible classroom interventions (Stage 3 of the 5-Stage LOA process)

Have you ever accessed the CCBC LOA web page to get information about assessment projects or results?

- Yes No

Did you find the LOA web pages helpful?

- Yes No

Do you have any suggestions for improving the LOA web pages?

Did you know that CCBC has a Learning Outcomes Assessment Advisory Board (a group of people who meet 5 times a year to discuss and guide assessment activities)?

- Yes No

Would you like to become a member of LOAAB?

- Yes Not at this time

Thank you for completing this survey.

COURSE LEVEL LEARNING OUTCOMES ASSESSMENT

PREPARED BY:
TARA EISENHAUER EBERSOLE

MAY 2006

PREPARED WITH ASSISTANCE FROM THE LOA FACULTY TEAMS
DATA SUMMARIES PREPARED BY GAYLE FINK AND NATASHA MILLER

OVERVIEW

The Community College of Baltimore County (CCBC) is successfully and effectively measuring student learning outcomes via its High Impact Course Level Assessment Projects. The courses involved in these projects, and CCBC runs approximately 20 at any given time, involve multiple sections and multiple campuses. Hundreds of faculty members and thousands of students participate in assessment projects every semester. Consensus as to outcomes to be assessed is determined from the Common Course Outline, available for each course that is offered at the college. Faculty, the true experts as to what students should know and do when they leave their classrooms, are the designers of these experimental, formative assessments. Direct advisory assistance and support as well as a risk-free process are essential components to CCBC's assessment model. Every project follows the same five-stage process, yet each is unique and designed by faculty to meet the needs of the course, so that assessment is authentic and valid.

Communication of the evidence collected is shared with internal and external constituents in a variety of ways, including the Learning Outcomes Assessment Advisory Board and the Learning Outcomes Assessment web page. Course-level assessment is the cornerstone of our assessment initiatives, but it is just one piece of the comprehensive assessment model at CCBC that also includes assessment at the program and institutional levels.

CCBC is currently in the seventh year of faculty participation in course level assessment projects. With our history in this area, CCBC continues to serve as a model for other institutions attempting to develop their learning outcomes assessment plans. Faculty and administrators in this area work as consultants in the assessment field through a variety of local and national presentations as well as community service outreach to individual colleges. This year the LOA High Impact program was recognized nationally by the Council for Higher Education Accreditation as the only community college to receive its prestigious award. The award was based on the program's effective and innovative means of demonstrating student outcomes and ability to provide that information to the public.

Initially the college focused on Level 1 projects – single courses. Currently, there are no Level 1 projects and we now support one Level 2 project – multiple sections of a course, and are currently documenting the progress of eighteen high impact course level assessment projects. These projects are considered to be Level 3 since they involve all sections of the course at CCBC including adjunct and on-line sections. These projects follow classic experimental procedures

whereby the first full assessment is deemed the “control” group and baseline data is collected. Based on full data analysis, the teams determine strengths and weaknesses in student learning and produce a plan for the implementation of curricular or administrative interventions. Once in place, the course is reassessed and the results from this “treatment” group are evaluated as to the benefits of the intervention. Both post-test only and pre/post-test designs are acceptable and utilized in these projects, depending on the discipline and course objectives. In addition, some teams have opted to use the evaluation of a specific assignment or portfolio that matches the course objectives using a grading rubric that has been normed and externally validated.

These projects are time-consuming requiring a minimum of three semesters, but more often following a six-semester plan. Generally one semester is necessary for planning, a second semester to pilot the assessment instrument(s), a third semester for the first full assessment, a fourth to determine and implement the appropriate intervention, the fifth semester for the second full assessment, and a sixth semester for the final analysis and report. Faculty have been diligent and have progressed forward with these projects this year. Each of the steps of the process is identified with a particular stage of the LOA process:

- Stage 1: Designing and Proposing a Learning Outcomes Assessment Project
- Stage 2: Implementing the Design and Collecting and Analyzing the Data
- Stage 3: Redesigning the Course to Improve Student Learning
- Stage 4: Implementing Course Revisions and Reassessing Student Learning
- Stage 5: Final Analysis and Reporting Results

TABLE 1
Stages of Assessment and Number of LOA Projects in Each Phase

Stages of Learning Outcomes Assessment Projects (up to Spring, 2006)					
	1	2	3	4	5
Number of Course Projects	4	4	3	4	3

PROJECT SUMMARIES

High Impact Courses: 2001 Cohort

TABLE 2
Stages, Courses, and Responsibilities for 2001 LOA Cohort

Stage	Project	Dean	Faculty
5	Principles of Accounting I (ACCT 101)	<i>Avon Garrett</i>	* Betty Lipford, Kathleen Gandy, Gina Shea
3	Introduction to Psychology (PSYC 101)	<i>Avon Garrett</i>	*Ira Albert, Charles Seltzer, Charles Miron

ACCT 101:

The assessment project and final data analysis was completed, compiled, and reported. The interventions implemented included increased computer assisted instruction, increased number of Supplemental Instruction sections and use of WebCT. The assessment instrument included an in-house designed and externally validated post-test. A final report is pending.

PSYC 101:

The first full assessment was completed in spring 2004 using an in-house designed multiple-choice post-test that was externally validated by members of the Psychology Advisory Board. The team actually began their project in 2001 but chose to revise their assessment instrument. The new instrument measures the students' knowledge of seven key areas of psychology. The data analysis was presented to the team leader. Interventions included a faculty advisement and tracking program that was supported through funds from a Closing the Gap grant. In addition the faculty chose to focus on putting more teaching emphasis on weak areas. Reassessment is tentatively scheduled for spring 2007.

TABLE 3
Stages, Courses, and Responsibilities for 2002 LOA Cohort

Stage	Project	Dean	Faculty
5	Introduction to Computers (CINS 101)	<i>Michael Netzer</i>	* Jerry Patchen, Valerie Farmer, Ann Bonner, Paulette Comet
3	College Composition I (ENGL 101)	<i>Steve Tanner</i>	*Margy McCampbell, Peter Adams, Patricia Hunt, Meredyth Santangelo
5	Achieving Student Success (SDEV 101)	<i>Alicia Harvey-Smith, Cindy Peterka, Carol Sullivan</i>	*Judith Maisey, Karyn Schulz, Madeline Hart,

CINS 101:

The CINS 101 Learning Outcomes Assessment (LOA) project was conducted during the spring 2004 and 2006 semesters on all three CCBC main campuses. The assessment instruments include an application skills test correlated with the Microsoft Office User Specialist (MOUS) certification exam and an in-house designed cognitive skills exam correlated with the College-Level Examination Program (CLEP). The team selected for their interventions a common textbook and software, training for adjuncts, focus on improving math skills, and a change in the order of skill presentation.

- A total of 69 sections of CINS 101 ran during the spring 2004 semester while there were 76 sections in the Spring 2006 semester
- Distribution of spring 2004 sections: Catonsville – 28, Dundalk – 12 and Essex – 29
- Distribution of spring 2006 sections: Catonsville – 27, Dundalk – 14 and Essex – 35
- During the spring 2004 and 2006 semesters, the majority of the students were female and Caucasian (Table 3.1)
- African-American students represented 33% and 36% of the CINS 101 population in the spring 2004 and 2006 semesters, respectively (Table 3.2)
- During the spring 2004 semester students in the age range of 20 thru 24 years old accounted for 43% of CINS 101 students but decreased to 31% in the spring 2006 semester
- In contrast to the previous findings, in spring 2004, 28% of students ranged in age from 18 to 19 years old and increased to 38% in spring 2006 (Table 3.3)
- Over 1,500 students were awarded grades at the end of the Spring 2004 semester and 1663 received grades at the end of the Spring 2006 semester
- Upon completion of the Spring 2004 semester 71% of students successfully completed the course with a grade of A thru D, 20% received a grade of F and 9% withdrew from the course (Table 3.4)
- In contrast to the spring 2004 semester, 68% of students successfully completed the spring 2006 course while 21% received an F and 10% withdrew from the course
- African-American successfully completed the course at a rate of 62% in the spring 2004 semester and decreased to a 56% successful completion rate in the spring 2006 semester (Table 3.5)
- Caucasian students successfully completed the course at similar rates for both semesters, 77% and 75%

TABLE 3.1
Percent and number of males and females in CINS 101 during the Spring 2004 and 2006 semesters

Gender	SPRING 2004				SPRING 2006			
	<i>Catonsville</i>	<i>Dundalk</i>	<i>Essex</i>	<i>CCBC</i>	<i>Catonsville</i>	<i>Dundalk</i>	<i>Essex</i>	<i>CCBC</i>
Female	54% (367)	59% (137)	57% (381)	56% (885)	54% (331)	64% (170)	51% (403)	54% (904)
Male	47% (319)	40% (93)	42% (281)	44% (693)	45% (276)	36% (94)	48% (373)	45% (743)
Unknown	NA	1% (3)	1% (8)	1% (11)	1% (7)	0.4% (1)	1% (8)	1% (16)
Total	686	233	670	1589	614	265	784	1663

May not add up to 100% due to rounding

TABLE 3.2
The ethnic characteristics of students in CINS 101 during the Spring 2004 and 2006 semesters

Ethnicity	SPRING 2004				SPRING 2006			
	<i>Catonsville</i>	<i>Dundalk</i>	<i>Essex</i>	<i>CCBC</i>	<i>Catonsville</i>	<i>Dundalk</i>	<i>Essex</i>	<i>CCBC</i>
African-American	43% (297)	30% (69)	25% (164)	33% (530)	45% (275)	35% (92)	28% (223)	36% (590)
Caucasian	39% (268)	64% (148)	65% (434)	54% (850)	43% (264)	55% (146)	59% (466)	53% (876)
Other Groups	14% (96)	4% (9)	10% (64)	11% (169)	11% (67)	9% (23)	11% (87)	11% (177)
Unknown	4% (25)	3% (7)	1% (8)	3% (40)	1% (8)	2% (4)	1% (8)	1% (20)

May not add up to 100% due to rounding

TABLE 3.3
The age range of students in CINS 101 during the Spring 2004 and 2006 semesters

Age	SPRING 2004				SPRING 2006			
	<i>Catonsville</i>	<i>Dundalk</i>	<i>Essex</i>	<i>CCBC</i>	<i>Catonsville</i>	<i>Dundalk</i>	<i>Essex</i>	<i>CCBC</i>
Less than 18	1% (5)	0.4% (1)	1% (7)	1% (13)	2% (13)	7% (19)	2% (19)	3% (51)
18 – 19	27% (182)	23% (54)	32% (215)	28% (451)	40% (245)	26% (70)	40% (312)	38% (627)
20 – 24	44% (301)	35% (81)	45% (301)	43% (683)	28% (171)	31% (83)	33% (261)	31% (515)
25 – 29	10% (68)	14% (33)	8% (56)	10% (157)	12% (72)	13% (34)	11% (89)	12% (195)
30 – 39	11% (76)	15% (34)	8% (51)	10% (161)	9% (57)	12% (31)	8% (62)	9% (150)
40 and more	8% (54)	13% (30)	6% (39)	8% (123)	9% (56)	11% (28)	5% (41)	8% (125)

May not add up to 100% due to rounding

TABLE 3.4
Grade distribution for CINS 101 for both the Spring 2004 and 2006 semesters

Grades	SPRING 2004				SPRING 2006			
	<i>Catonsville</i>	<i>Dundalk</i>	<i>Essex</i>	<i>CCBC</i>	<i>Catonsville</i>	<i>Dundalk</i>	<i>Essex</i>	<i>CCBC</i>
A-D	69% (471)	64% (149)	76% (507)	71% (1127)	71% (435)	60% (158)	70% (546)	68% (1139)
AU	0.4% (3)	0.4% (1)	1% (4)	1% (8)	0.2% (1)	1.1% (3)	0.4% (3)	0.4% (7)
F	24% (163)	24% (55)	14% (94)	20% (312)	23% (139)	23% (61)	18% (143)	21% (343)
I	NA	NA	NA	NA	0.3% (2)	2.6% (7)	NA	0.5% (9)
W	7% (49)	12% (28)	10% (65)	9% (142)	6% (37)	14% (36)	12% (92)	10% (165)

May not add up to 100% due to rounding

TABLE 3.5
Grade distribution for CINS 101 by ethnicity for the Spring 2004 and 2006 semesters

Grades	SPRING 2004				SPRING 2006			
	<i>African-American</i>	<i>Caucasian</i>	<i>Other groups</i>	<i>Unknown</i>	<i>African-American</i>	<i>Caucasian</i>	<i>Other groups</i>	<i>Unknown</i>
A-D	62% (326)	77% (655)	68% (115)	78% (31)	56% (333)	75% (661)	73% (130)	75% (15)
AU	1% (3)	0.4% (3)	1% (1)	3% (1)	1% (4)	0.3% (3)	NA	NA
F	25% (133)	15% (131)	24% (40)	20% (8)	27% (161)	17% (147)	18% (32)	15% (3)
I	NA	NA	NA	NA	1% (5)	0.5% (4)	NA	NA
W	13% (68)	7% (61)	8% (13)	NA	15% (87)	7% (61)	8% (15)	10% (2)

May not add up to 100% due to rounding

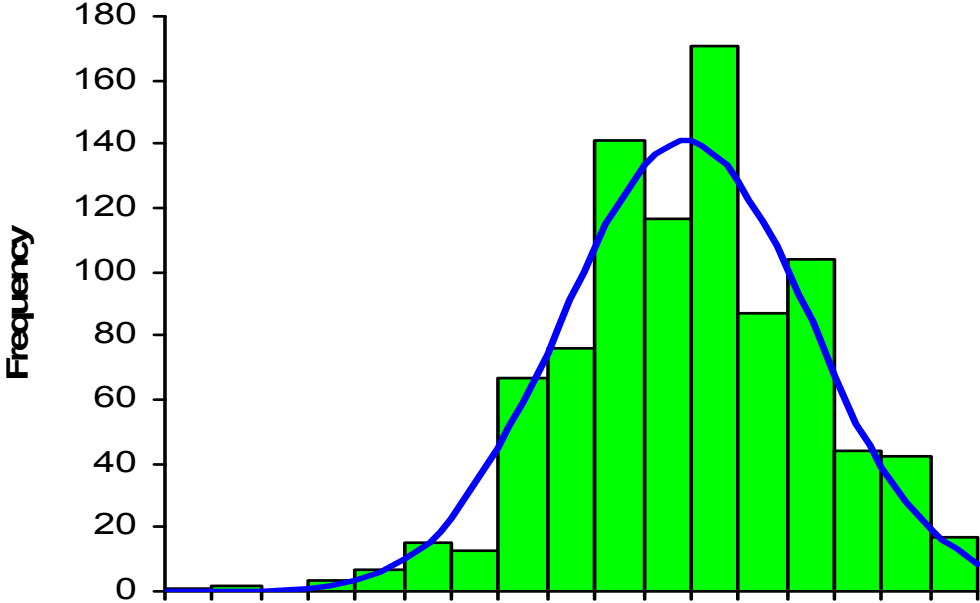
The CINS 101 Assessment committee developed the assessment instruments. For the ‘applications’ portion of the instruments, the committee was guided by MOS core skills certification standards. The bank of questions/problems used by the committee had already been approved by Microsoft as meeting acceptable skill testing against the industry certification standard.

The CINS 101 LOA assessment was comprised of two parts. Part 1 assesses knowledge and skills with computer applications. Part 2 assesses knowledge and skills with the four major Microsoft applications: Word, PowerPoint (PPT), Excel and Access.

This data analyses primarily uses descriptive statistics (i.e., frequencies, means, medians, ranges, etc.) The first set of descriptive statistics is those for CCBC or “all campuses” and relates to the CLEP equivalent test (part 1) prepared by the Committee. This data set includes the spring 2003 results of Essex and the spring 2004 results of Catonsville and Dundalk.

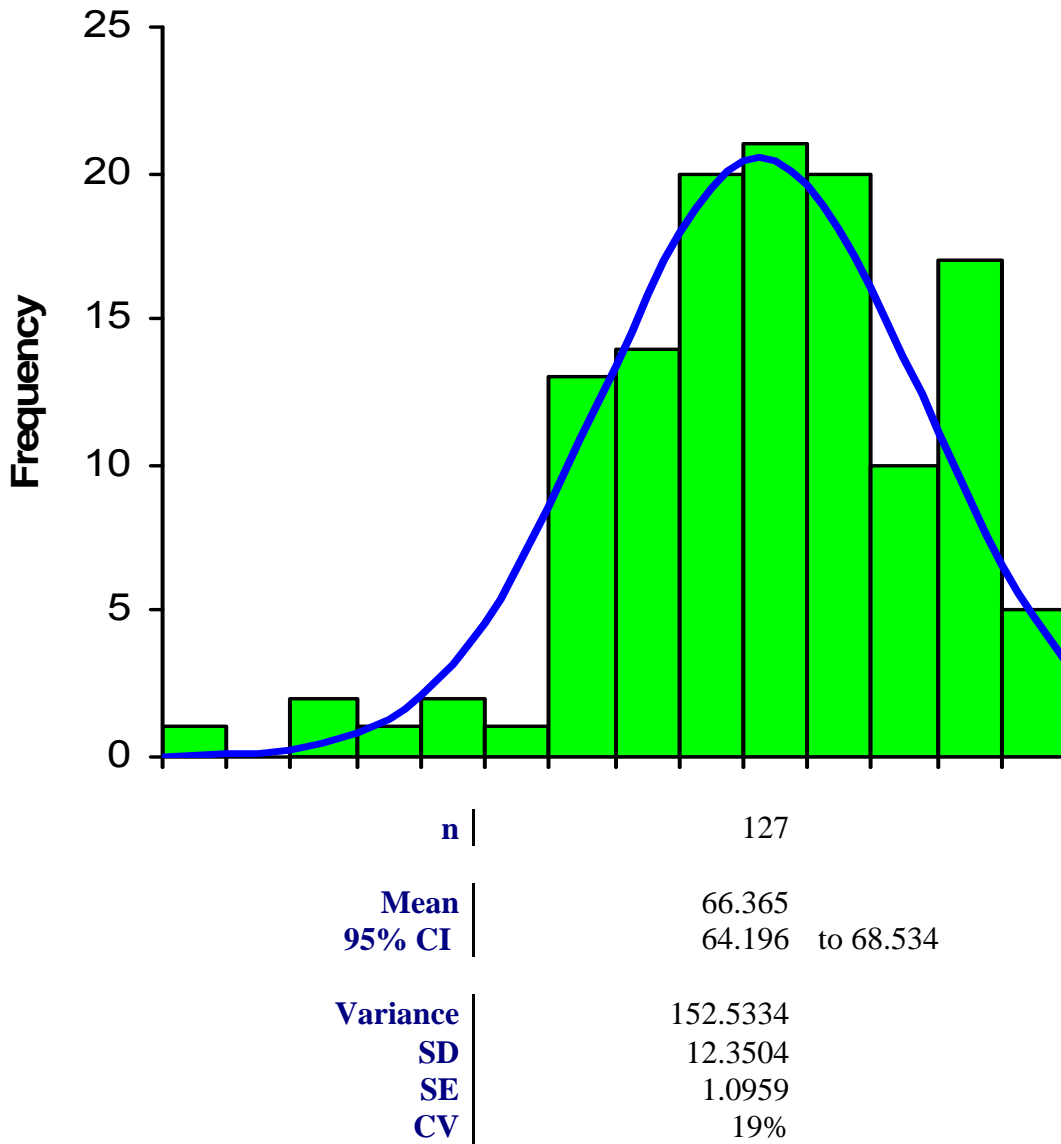
CINS 101 LOA CLEP Equiv.	Scores for CCBC/All Campuses
Mean	69.45916115
Standard Error	0.424642764
Median	70
Mode	68
Standard Deviation	12.78167667
Sample Variance	163.3712585
Kurtosis	0.327543903
Skewness	-0.206374392
Range	82
Minimum	18
Maximum	100
Sum	62930
Count	906

A better visual depiction of the all-campus score statistics is presented here:

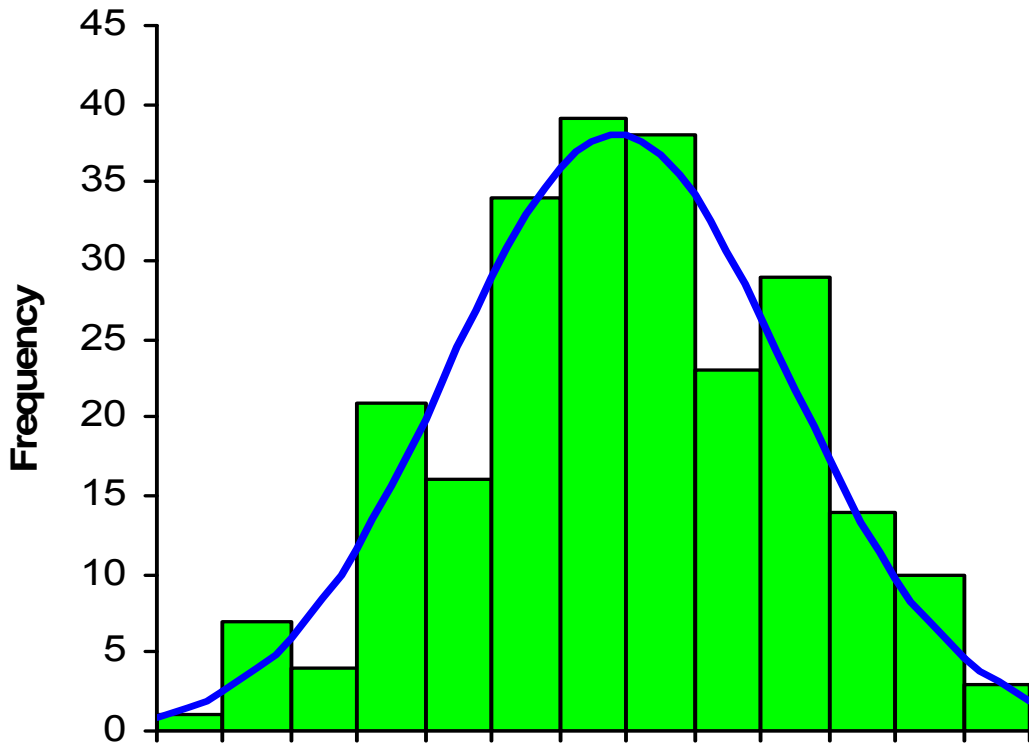


The breakdown by campus is as follows:

DUNDALK:

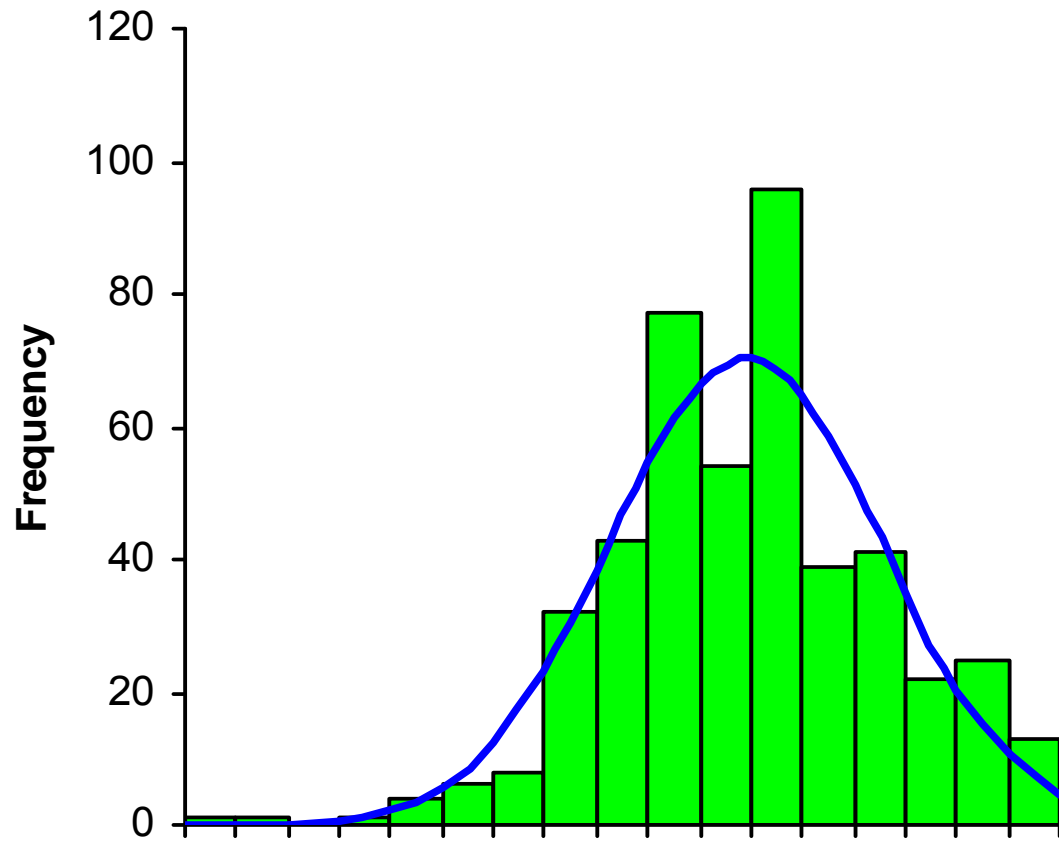


CATONSVILLE:



n	|	239
Mean	|	69.230
95% CI	|	67.635 to 70.825
Variance	|	156.7157
SD	|	12.5186
SE	|	0.8098
CV	|	18%

ESSEX:



n	|	463
Mean	|	69.451
95% CI	|	68.258 to 70.645
Variance	|	170.8412
SD	|	13.0706
SE	|	0.6074
CV	|	19%

PART 1 OF LOA ASSESSMENT: A CLEP EQUIVALENT EXAM

The frequency distribution above shows a distribution of scores that is peaked (leptokurtic), with most scores close to the mean. There is a disproportionately high number of scores above the mean, as indicated by a negative skew of .20. It is this skew, along with a Shapiro-Wilk score of .99, at probability of error less than $<.00001$, that enables us to conclude this is not a normal distribution. A separate experience with CLEP equivalent exam was recorded for the Essex campus in spring 2004. The mean score for that exam was 69.3 with a count of 466 test-takers. Similar skew was also noted.

Since the exam is equivalent to a standardized test, the CLEP exam, the committee is required to answer why so many CCBC students did so well on the CLEP Equivalency exam. In particular, the committee expected approximately 9% of the test-takers would achieve a score of 75% or better, but in reality, they achieved a success rate over three times that rate. 32% of CCBC students taking the exam earned a score of 75% or better. Similarly, and in the same vein, 721 out of 908 passed the exam. That is a 79% pass rate. Because of the skew in the distribution of scores, we are not able to apply inferential statistics and must rely for now upon descriptive statistics and the experience of committee members to answer the question of a high pass rate.

The faculty offers these reasons to explain why CCBC students performed well on the CLEP equivalency exam:

1. SAM Assessment and Training was used to review computer concepts as well as testing student acquisition of computer concepts.
2. Many students utilized the Interactive Office Applications Training component of SAM Assessment and Training.
3. SAM Assessment and Training generated Study Guides that mapped back to the textbooks for both computer concepts and Office applications.

To begin discussing the second part, we need to keep in mind that fifty percent (50%) of a student's final exam grade was weighted to the computer concepts exam, the rest was weighted to the four principal Microsoft office productivity software applications. The results of Part 2 exams are on the next page. The following table provides the data collected during the study period, before & after data, Microsoft Certification Portion of this LOA project.

CINS 101 LOA Microsoft Applications Certification Equivalency Exams

Campus Name	Dundalk				Catonsville				Essex				All Campuses			
	Word	Excel	PPT	Access	Word	Excel	PPT	Access	Word	Excel	PPT	Access	Word	Excel	PPT	Access
Sp 2006 Mean Test Score (100%)	62	54	60	62	65	55	72	72	74	56	71	70	68	55	69	68
Sp 2004 Mean Test Score (100%)	60	43	51	62	68	57	60	73								
Fall 2003 Mean Test Score (100%)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	69	50	71	64				
Blended Mean Test Score (100%)													68	52	63	68
N= Number of Test-takers(2003/4)	132	118	127	128	415	393	412	406	319	313	310	307	866	814	849	841
N= Number of Test-takers(2006)	142	143	134	137	342	293	347	320	388	401	425	395	872	924	906	852
No. of Students able to Pass Microsoft Cert. Exam(2003/4)	29	12	28	47	176	107	113	249	120	50	198	115	325	169	339	411
No. of Students able to Pass Microsoft Cert. Exam(2006)	49	48	40	47	162	87	167	188	209	38	101	218	420	173	308	453

To earn the Microsoft Office Specialist (Office Specialist) certification for Microsoft Office or Microsoft Project, students must pass one or more certification exams. Office Specialist exams provide a valid and reliable measure of technical proficiency and expertise by evaluating overall comprehension of Office or Microsoft Project programs, ability to use the advanced features, and ability to integrate the Office programs with other software programs. The CINS 101 LOA Microsoft Certification Equivalency Tests are a valid sample of actual certification tests in the Microsoft knowledge/skills domain.

The CINS 101 LOA Committee, along with the assistance of CCBS systems staff, decided to focus on improving Excel scores. The committee concluded CCBC students were doing very well with computer literacy, Microsoft Word, PPT and Access. Therefore, Excel was the primary focus of phase 2 of the LOA. The Committee surveyed faculty for insights and recommendations. Numerous strategies were offered. A consensus formed around the simple idea that more classroom time, exercises and assignments in Excel might increase Excel LOA performance. Therefore, the post-test primarily focuses on the extent to which student learning in Excel could increase. Faculty opted to address the problem with an intervention of spending more classroom time teaching and practicing Excel skills. Spending four (4) full classroom weeks on Excel was mandated for all CINS 101 classes.

The table above shows the results of the scores for Excel with the intervention for spring 2006 in comparison to earlier testing in 2003-4. The results of the spring 2006 assessment show improvement across all four skills areas including Excel.

The increase in Excel performance, approximately 3 quality points leaves room for additional improvement. Still, it marks the right direction and shows scores are somewhat elastic. T-tests on the 2003/4 Excel score sample paired with the 2006 Excel scores indicated statistical significant difference. The results are presented in the table below:

t-Test: Paired Two Sample for Means		
	<i>Variable 1</i>	<i>Variable 2</i>
Mean	52.03233831	55.02860697
Variance	603.8171347	630.9144982
Observations	804	804
Pearson Correlation	0.05017753	
Hypothesized Mean Difference	0	
df	803	
t Stat	-2.480838573	
P(T<=t) one-tail	0.006655574	
t Critical one-tail	1.646753427	
P(T<=t) two-tail	0.013311149	
t Critical two-tail	1.962922585	

The SAIT faculty met their objective of increasing scores on the Excel performance test. Other methods will be used by faculty over time to continue to expand on these gains.

ENGL 101:

The first full assessment was completed in spring 2004. The assessment instrument included an in-house pre and post-writing assignment, coded to enable blind grading, with a rubric that was reviewed by external consultants and refined. The data analysis was presented to team leaders and further refined. Table 3.6 shows the most recent findings, a disaggregation of student outcomes by veteran, new and adjunct faculty. The intervention report is pending but will include professional development including adjunct faculty. In addition, research by an individual faculty member while on sabbatical regarding the best methods for teaching grammar have now been widely shared through departmental and Board of Trustees presentations. The findings will be incorporated with the upcoming professional development of this team. Final assessment is tentatively scheduled for spring '07.

TABLE 3.6
ENGL 101 LOA Scores for New Faculty compared to Veteran Faculty

Categories	Pre-Score Veteran Faculty n=102	Post-Score Veteran Faculty	<i>Diff. means</i>	Pre-Score Adjunct Faculty n=120	Post-Score Adjunct Faculty	<i>Diff. means</i>	Pre-Score New Faculty n=46	Post-Score New Faculty	<i>Diff. means</i>
Thesis	3.38	3.81*	.43	3.61	3.41	-.2	3.76	3.85	.09
Support	2.99	3.35*	.36	3.10	3.15	.05	3.24	3.58	.34
Language	3.00	3.24	.24	3.09	3.12	.03	3.18	3.44	.26
Structure	2.92	3.27*	.30	3.04	3.19	.15	3.20	3.57	.37
Grammar	3.24	3.54*	.39	3.34	3.31	-.03	3.54	3.76	.22
Punctuation	3.46	3.63	.17	3.57	3.56	-.01	3.52	3.87	.35
Sources	2.99	3.43*	.44	2.99	3.13	.14	3.24	3.83*	.59
Total	21.82	24.09*	2.27	22.67	22.77	.10	23.61	25.74*	2.13

SDEV 101:

A mixed measurement approach was used to assess the courses objectives. The mixed measure included a pre and post-test of 30 multiple choice questions as well as 9 application-based portfolio assignments that were scored using rubrics designed specifically for the assessment project. The assessment project is now complete with the first assessment having been administered in spring 2003 and the second in spring 2005. The 2005 project included a significantly revised portfolio assessment.

- A total of 31 sections of SDEV 101 ran during spring 2005: 14 at Catonsville, 5 at Dundalk and 12 at Essex with 16 sections offered during the morning, 7 in the afternoon and 6 in the evening.
- Over 600 students (N=613) were enrolled in SDEV 101 at the end of the third week: 303 at Catonsville, 94 at Dundalk and 216 at Essex. This is a 13% increase over spring 2003 with most of the growth occurring at the Essex campus.
- Of the 613 students with preliminary grades posted, 486 (79%) received a grade of A, B, C, D. See Tables 3.7 and 3.8 for the grade distributions by course start time and campus.

TABLE 3.7
SDEV 101 Grade Distributions for Spring 2005

Time of Day	Grades	Catonsville	Dundalk	Essex	CCBC	All Courses CCBC (Spring 2005)
Morning	A-D	69% (92/134)	61% (36/59)	70% (98/140)	68% (226/333)	
	F	20% (27/134)	24% (14/59)	24% (33/140)	22% (74/333)	
	W	11% (15/134)	15% (9/59)	6% (9/140)	10% (33/333)	
Afternoon	A-D	63% (62/99)	64% (9/14)	84% (32/38)	68% (103/151)	
	F	28% (28/99)	N<5	N<5	24% (36/151)	
	W	9% (9/99)	N<5	N<5	8% (12/151)	
Evening	A-D	84% (59/70)	57% (12/21)	92% (35/38)	82% (106/129)	
	F	10% (7/70)	29% (6/21)	0%	10% (13/129)	
	W	6% (4/70)	N<5	N<5	8% (10/129)	
Total	A-D	70% (213/303)	61% (57/94)	76% (165/216)	79% (486/613)	73% (34,292/46,752)
	F	20% (62/303)	26% (24/94)	17% (37/216)	20% (123/613)	13% (6,132/46,752)
	W	9% (28/303)	14% (13/94)	6% (14/216)	9% (55/613)	8% (3,963/46,752)

May not add to 100% due to rounding; excludes I grades and section DZ at Essex (N=4)

TABLE 3.8
SDEV 101 Grade Distributions for Spring 2003

Time of Day	Grades	Catonsville	Dundalk	Essex	CCBC	All Courses CCBC (Fall 2002)
Morning	A-D	58% (61/105)	72% (43/60)	74% (89/120)	68% (193/285)	
	F	33% (35/105)	25% (15/60)	20% (24/120)	26% (74/285)	
	W	9% (9/105)	3% (2/60)	6% (7/120)	6% (18/285)	
Afternoon	A-D	70% (48/69)			70% (48/69)	
	F	20% (14/69)			20% (14/69)	
	W	10% (7/69)			10% (7/69)	
Evening	A-D	65% (55/85)	60% (18/30)	76% (25/33)	66% (98/148)	
	F	24% (20/85)	37% (11/30)	9% (3/33)	23% (34/148)	
	W	11% (10/85)	3% (1/30)	15% (5/33)	11% (16/148)	
Total	A-D	63% (164/259)	68% (61/90)	74% (114/153)	68% (339/502)	75% (38,646/51,229)
	F	27% (69/259)	29% (26/90)	18% (27/153)	24% (122/502)	16% (8,212/51,229)
	W	10% (26/259)	3% (3/90)	8% (12/153)	8% (41/502)	9% (4,371/51,229)

Tables 3.9 and 3.10 provide the grade distributions for African-American and White students for spring 2005 and 2003. The overall success rate increased for African-American students. However, the success rate of African American students did not increase between the two semesters at the Dundalk campus.

TABLE 3.9
Spring 2005 SDEV 101 Grades for African-American and White Students

Ethnicity	Campus	Data	A	B	C	D	F	W	Grand Total
African-American/Black	C	N	50	45	37	15	52	18	217
		% of Row	23%	21%	17%	7%	24%	8%	100%
	D	N	8	1	5	3	15	8	40
% of Row		20%	3%	13%	8%	38%	20%	100%	
E	N	31	27	15	3	22	4	102	
	% of Row	30%	26%	15%	3%	22%	4%	100%	
African-American/Black N			89	73	57	21	89	30	359
African-American/Black % of Row			25%	20%	16%	6%	25%	8%	100%
White/Caucasian	C	N	22	15	5	3	8	7	60
		% of Row	37%	25%	8%	5%	13%	12%	100%
	D	N	17	10	5	3	8	4	47
% of Row		36%	21%	11%	6%	17%	9%	100%	
E	N	38	22	14	2	13	8	97	
	% of Row	39%	23%	14%	2%	13%	8%	100%	
White/Caucasian N			77	47	24	8	29	19	204
White/Caucasian % of Row			38%	23%	12%	4%	14%	9%	100%

TABLE 3.10
Spring 2003 SDEV 101 Grades for African-American and White Students

Ethnicity	Campus	Data	A	B	C	D	F	W	Grand Total
African-American/Black	C	N	43	15	22	10	49	21	160
		% of Row	27%	9%	14%	6%	31%	13%	100%
	D	N	8	6	3	2	15	1	35
% of Row		23%	17%	9%	6%	43%	3%	100%	
E	N	20	16	6	4	17	7	70	
	% of Row	29%	23%	9%	6%	24%	10%	100%	
African-American/Black N			71	37	31	16	81	29	265
African-American/Black % of Row			27%	14%	12%	6%	31%	11%	100%
White/Caucasian	C	N	33	3	7	2	15	5	65
		% of Row	51%	5%	11%	3%	23%	8%	100%
	D	N	15	14	4	5	10	2	50
% of Row		30%	28%	8%	10%	20%	4%	100%	
E	N	29	11	14	3	7	2	66	
	% of Row	44%	17%	21%	5%	11%	3%	100%	
White/Caucasian N			77	28	25	10	32	9	181
White/Caucasian % of Row			43%	15%	14%	6%	18%	5%	100%

Tables 3.11 and 3.12 show the demographic distributions of the population and the sample for both LOA administrations. The 2005 sample is fairly representative of the population both for CCBC and each campus with regard to gender, ethnicity and age. In the 2003 sample African-Americans were under-represented in the LOA matched pairs sample. This may be due to fact that in Spring 2003 African-Americans fail (30%) and withdraw (12%) from SDEV 101 at a higher rate than that for white students (fail 18% and withdraw 5%) and therefore have not be in class at the time the post-test was administered.

TABLE 3.11
Spring 2005 Demographic Characteristics SDEV 101 and LOA Matched Pairs

	All SDEV Sections								LOA Matched Pairs							
	CAT		DUN		ESSEX		CCBC		CAT		DUN		ESSEX		CCBC	
	N	%	N	%			N	%	N	%	N	%	N	%	N	%
Total Students	308		95		226		629		160		53		105		318	
Gender																
Female	194	63	60	63	144	64	398	63	112	70	33	62	72	69	217	68
Male	114	37	34	36	78	35	226	36	48	30	19	36	31	30	98	31
Unknown			1	1	4	2	5	1			1	1	2	2	3	1
Ethnicity																
African-American	221	72	40	42	105	46	366	58	111	69	18	34	44	42	173	54
Other Minority	13	4	6	6	10	4	29	6	8	5	5	9	8	8	21	7
White	60	19	48	51	101	45	209	33	35	22	30	57	47	45	112	35
Unknown	14	5	1	1	10	4	25	4	6	4	0	0	6	6	12	4
Age																
<18	12	4	10	11	10	4	32	6	8	5	6	11	3	3	17	5
18-19	139	45	31	33	89	39	259	41	73	46	17	32	38	36	128	40
20-24	82	27	31	33	79	35	192	31	33	21	17	32	39	37	89	28
25-29	31	10	10	11	20	9	61	10	15	9	6	11	9	9	30	9
30-39	29	9	9	9	21	9	59	9	20	13	5	9	13	12	38	12
40 and older	15	5	4	4	7	3	26	4	11	7	2	4	3	3	16	5
Unknown																

May not add to 100% due to rounding.

TABLE 3.12
Spring 2003 Demographic Characteristics SDEV 101 and LOA Matched Pairs

	All SDEV Sections								LOA Matched Pairs							
	CAT		DUN		ESSEX		CCBC		CAT		DUN		ESSEX		CCBC	
	N	%	N	%			N	%	N	%	N	%	N	%	N	%
Total Students	259		90		153		502		132		58		60		250	
Gender																
Female	158	61	60	67	94	61	312	63	76	58	42	72	40	67	158	63
Male	100	39	30	33	56	37	186	37	55	42	16	28	19	32	90	36
Unknown	1	0			3	2	4	0	1	0			1	1	2	1
Ethnicity																
African-American	160	62	35	39	70	46	265	53	69	52	18	31	26	43	113	45
Other Minority	20	8	3	3	7	5	30	6	11	8	1	2	3	5	15	6
White	65	25	50	56	66	43	181	36	41	31	37	64	27	45	105	42
Unknown	14	5	2	2	10	6	26	5	11	8	2	3	4	7	17	7
Age																
<18	3	1	1	1	2	1	6	1	3	2	0		2	3	5	2
18-19	93	36	27	30	43	28	163	32	52	39	21	36	16	27	89	36
20-24	84	32	37	41	77	50	198	39	33	25	21	36	29	48	83	33
25-29	32	12	8	9	16	10	56	11	18	14	5	9	7	12	30	12
30-39	31	12	7	8	10	7	48	10	18	14	4	7	4	7	26	10
40 and older	15	6	10	11	4	3	29	6	8	6	7	12	1	1	16	6
Unknown	1	0			1	0	2	0	0				1	1	1	0

May not add to 100% due to rounding.

Table 3.13 lists the mean pre- and post-test scores for both the LOA administrations. While the change in the mean scores between pre- and post-tests are significant overall and for each campus for both 2003 and 2005, the overall mean scores did not change between the two LOA terms.

TABLE 3.13
SDEV 101 LOA Pre and Post-test Mean Scores

Campus	Spring 2005			Spring 2003		
	N	Pre Mean	Post Mean	N	Pre Mean	Post Mean
C	160	19.5	23.2	132	19	22.5
D	53	18.7	20.8	58	18	21.4
E	105	19.1	20.8	60	20	22.4
Total	318	19.3	22.0	220	19	22.2

Analysis of post-test total scores was also compiled by location of course and demographic characteristics (See Table 3.14).

- Statistically significant differences in post-test scores were found at the following demographic levels:
 - Between campus – 2005 and 2003 - White student mean post-test scores at Catonsville and the other campuses differed significantly (^)
 - Within campus – 2005 African American and white post-test scores differed significantly at Dundalk and Essex (*). 2003 – Differences were only at Catonsville.
 - Within campus – 2003 African-American male and female post-test scores differed significantly at Essex (**)
 - Within campus – 2005 – African-American male and white male post test scores differed significantly at Dundalk and Essex (!). Female scores differed significantly between these ethnicities at Essex (!).
- There was no statistical significance between the mean post-test scores of females and males.

TABLE 3.14
Post-Test LOA Matched Pair Mean Scores by Demographic Characteristics

	<i>Spring 2005</i>				<i>Spring 2003</i>			
	Catonsville (N=160)	Dundalk (N=53)	Essex (N=105)	CCBC (N=220)	Catonsville (N=132)	Dundalk (N=58)	Essex (N=60)	CCBC (N=220)
Mean	23.2	20.9	20.8	22.0	22.5	21.4	22.4	22.2
Ethnicity								
African-American	23.0	18.9*	19.2*	21.6	21.6*	20.8	21.6	21.5
White	24.1^	22.2^	22.6^	22.9	24.2^*	21.7^	22.7^	22.9
Gender								
Female	23.5	20.8	20.9	22.3	22.9	21.7	22.8	22.5
African-American	21.6	20.1	17.4!	22.1	21.8	21.6	22.5**	22.0
White	24.4	21.3	22.7!	22.9	25.0	21.7	22.9	23.0
Male	22.3	20.6	20.4	21.4	22.0	20.8	21.5	21.7
African-American	23.5	17.9!	19.8!	20.6	21.2	19.6	17.8**	20.4
White	23.9	22.6!	22.5!	23.0	23.4	21.8	22.4	22.7

The assessment instrument was broken down into nine objective areas to give an indication of areas where students were gaining knowledge. The SDEV LOA project leader made the association between question and objective. Questions are associated with one category. Post-test mean scores are provided in Table 3.15. Overall mean scores for recalling information went down between the two LOA administrations. Assessing general health habits mean scores improved in 2005 compared to 2003. Other content areas remained the same.

TABLE 3.15
Mean Post-Test Scores by LOA Term, Objective and Campus

Objective	N of Questions	Spring 2005				Spring 2003			
		CAT	DUN	Essex	CCBC	CAT	DUN	Essex	CCBC
Improve ability to recall information	4	3.4	3.0	3.0	3.2	3.9	3.5	3.7	3.8
Read a textbook with improved understanding and retention	3	2.4	2.3	2.2	2.3	2.3	2.3	2.2	2.3
Prepare for and take tests	5	3.4	2.9	2.8	3.1	3.0	2.8	3.1	3.0
Take effective notes	3	2.5	2.3	2.3	2.4	2.4	2.3	2.6	2.4
Listen, with comprehension, to a lecture	2	1.8	1.6	1.7	1.7	1.8	1.9	1.8	1.8
Describe and utilize a model of communication	4	3.1	2.8	2.9	3.0	3.1	2.9	3.1	3.1
Discuss several procedures for focusing attention	1	.81	.77	.79	.80	.72	.78	.82	.76
Assess general health habits	5	3.5	3.1	3.1	3.3	3.1	3.0	3.0	3.0
Strengthen skill needed for the changing world	3	2.3	2.0	2.0	2.1	2.2	1.9	2.2	2.1

The portfolio assessment portion of the SDEV 101 LOA was significantly revised for the 2005 administration. The 2003 rubric was based primarily on completion of assignments. The 2005 portfolio assessment contained a 4 point rubric on activity completion levels for 3 assignments. It also contained a 7 point rubric examining the quality of 6 assignments. A representative sample of 146 portfolios, out of a total enrollment of 613, was assessed by a team of independent readers. Of those 164, 160 could be matched to demographic characteristics. Seventy five portfolios were from Catonsville (24% sample), 19 from Dundalk (20% sample) and 66 from Essex (29% sample). Tables 3.16 – 3.24 provide a frequency distribution by campus and by rubric component. Overall, at least 30% of the portfolios did not contain specific assignments.

TABLE 3.16
Activity Completion Rubric
Resource Information Search

	Data	3	2	1	0	(blank)	Grand Total
C	N	31	8	5	31		75
	%	41%	11%	7%	41%	0%	100%
D	N	10	2	4	3		19
	%	53%	11%	21%	16%	0%	100%
E	N	27	14	5	18	2	66
	%	41%	21%	8%	27%	3%	100%
Total N		68	24	14	52	2	160
Total %		43%	15%	9%	33%	1%	100%

TABLE 3.17
Activity Completion Rubric
Transfer Information/Information Interview

	Data	3	2	0	Grand Total
C	N	33	2	40	75
	%	44%	3%	53%	100%
D	N	13		6	19
	%	68%	0%	32%	100%
E	N	34	1	31	66
	%	52%	2%	47%	100%
Total N		80	3	77	160
Total %		50%	2%	48%	100%

TABLE 3.18
Activity Completion Rubric
Letter to a New Student

	Data	3	2	1	0	(blank)	Grand Total
C	N	37	8	3	27		75
	%	49%	11%	4%	36%	0%	100%
D	N	13	1	1	4		19
	%	68%	5%	5%	21%	0%	100%
E	N	39	8	2	16	1	66
	%	59%	12%	3%	24%	2%	100%
Total N		89	17	6	47	1	160
Total %		56%	11%	4%	29%	1%	100%

TABLE 3.19
Writing Assignments Grading Rubric
Road Map to Success

	Data	6	5	4	3	2	1	0	(blank)	Grand Total
C	N	6	4	16	8	9	1	31		75
	%	8%	5%	21%	11%	12%	1%	41%	0%	100%
D	N	4	3	6	3	1	1	1		19
	%	21%	16%	32%	16%	5%	5%	5%	0%	100%
E	N	13	17	7	6	2		20	1	66
	%	20%	26%	11%	9%	3%	0%	30%	2%	100%
Total N		23	24	29	17	12	2	52	1	160
Total %		14%	15%	18%	11%	8%	1%	33%	1%	100%

TABLE 3.20
Writing Assignments Grading Rubric
Learning Styles

	Data	6	5	4	3	2	1	0	(blank)	Grand Total
C	N	13	7	12	8	4		31		75
	%	17%	9%	16%	11%	5%	0%	41%	0%	100%
D	N	4	4	2	3		1	4	1	19
	%	21%	21%	11%	16%	0%	5%	21%	5%	100%
E	N	18	13	8	9	1	1	16		66
	%	27%	20%	12%	14%	2%	2%	24%	0%	100%
Total N		35	24	22	20	5	2	51	1	160
Total %		22%	15%	14%	13%	3%	1%	32%	1%	100%

TABLE 3.21
Writing Assignments Grading Rubric
Time Management

	Data	6	5	4	3	2	1	0	Grand Total
C	N	7	7	19	10	6		26	75
	%	9%	9%	25%	13%	8%	0%	35%	100%
D	N	3	4	3	4	1	1	3	19
	%	16%	21%	16%	21%	5%	5%	16%	100%
E	N	14	8	12	9	2	1	20	66
	%	21%	12%	18%	14%	3%	2%	30%	100%
Total N		24	19	34	23	9	2	49	160
Total %		15%	12%	21%	14%	6%	1%	31%	100%

TABLE 3.22
Writing Assignments Grading Rubric
Reading Technique Activity

	Data	6	5	4	3	2	1	0	Grand Total
C	N	9	8	14	6	6	3	29	75
	%	12%	11%	19%	8%	8%	4%	39%	100%
D	N	3	2	4	1	2	2	5	19
	%	16%	11%	21%	5%	11%	11%	26%	100%
E	N	8	8	13	6	4	5	22	66
	%	12%	12%	20%	9%	6%	8%	33%	100%
Total N		20	18	31	13	12	10	56	160
Total %		13%	11%	19%	8%	8%	6%	35%	100%

TABLE 3.23
Writing Assignments Grading Rubric
Graduated Learning Plan (GLP)

	Data	6	5	4	3	2	1	0	(blank)	Grand Total
C	N	11	6	8	3			47		75
	%	15%	8%	11%	4%	0%	0%	63%	0%	100%
D	N	3	5	1	4	2		4		19
	%	16%	26%	5%	21%	11%	0%	21%	0%	100%
E	N	12	7	13	4	4	1	23	2	66
	%	18%	11%	20%	6%	6%	2%	35%	3%	100%
Total N		26	18	22	11	6	1	74	2	160
Total %		16%	11%	14%	7%	4%	1%	46%	1%	100%

TABLE 3.24
Writing Assignments Grading Rubric
Occupational Fact Sheet

	Data	6	5	4	3	2	1	0	Grand Total
C	N	6	6	13	2	2		46	75
	%	8%	8%	17%	3%	3%	0%	61%	100%
D	N	3	3	4		1	1	7	19
	%	16%	16%	21%	0%	5%	5%	37%	100%
E	N	11	8	9	5	1		32	66
	%	17%	12%	14%	8%	2%	0%	48%	100%
Total N		20	17	26	7	4	1	85	160
Total %		13%	11%	16%	4%	3%	1%	53%	100%

Each portfolio could receive a maximum score of 45. Table 3.25 is a distribution of total scores by campus.

TABLE 3.25
Total Portfolio Scores by Campus

Total Score Range	C	D	E	CCBC
1-8	18	2	4	24
9-17	19	3	19	41
18-26	18	4	18	40
27-35	17	7	15	39
36-45	3	3	10	16
Total	75	19	66	160

HIGH IMPACT COURSES: 2003 COHORT

TABLE 4
Stages, Courses, and Responsibilities for 2003 LOA Cohort

Stage	Project	Dean	Faculty
2	Introduction to Philosophy (PHIL 101)	Steve Tanner	* Wayne Alt, Dave Irvine
4	Introduction to Sociology (SOCL 101)	Avon Garrett	*Ann MacLellan
4	Fundamentals of Speech Communication (SPCM 101)	Steve Tanner	*Drew Kahl, Precious Stone, Anne Chamberlain
5	Biology I: Molecular and Cell (BIOL 110)	Donna Linkszt	*Karen Dalton, Julie Baugh, Dave O'Neill
4	Introduction to Business (MGMT 101)	Avon Garrett	*Jim Glover, Rose Cramer, Sheryl Parks, Larry Aaronson, Scott Vratarich.

PHIL 101:

After a full assessment and analysis was completed in fall 2004, a decision was made to refine the Common Course Outline and to redesign the assessment instrument. The newly developed assessment instrument includes a Common Graded Assignment and rubric to be incorporated with the General Education Assessment Team (GREAT) project. Assessment is tentatively scheduled for fall '06.

SOCL 101:

Assessment instruments included an in-house and externally validated pre and post-test as well as a qualitative paper to be incorporated with the GREAT assessment. After reviewing the data analysis following the first full assessment, faculty chose to target research methods by implementing a data collection assignment as their intervention. Reassessment is complete and data analysis is pending.

SPCM 101:

The first full assessment was completed in spring 2004 and this project is now in Stage 3. The speech faculty chose to combine two instruments to fully assess student achievement in speech communications. One assessment instrument is an in-house and externally validated pre/post exam that assesses three principles of speech communication. Other student information is obtained from the GREAT assessment and combined with the LOA data. The GREAT assignment involves the use of a speech critique qualitative paper. Videotapes of students modeling best practices in speech communications will be introduced in all classes as a new teaching strategy. Reassessment is tentatively scheduled for fall '07.

BIOL 110:

The assessment instrument is an in-house and externally validated 55 question multiple-choice exam that was embedded in the course final exam. The project also included the use of a diagnostic assessment instrument used at the beginning of the term that correlated with the ACT. The faculty team chose as their interventions the adoption of a college wide textbook, the creation of a teacher's handbook, and the adoption of a non-majors biology course on the Essex campus. The second assessment was completed in fall 2005. The data analysis report is pending.

MGMT 101:

The LOA project for the MGMT 101 course involves 50 multiple-choice test questions embedded in the final exam. The project measures 13 key concepts of management. Management professors from the College of Southern Maryland and Prince George's Community College reviewed the questions to ensure they matched the course objectives and provided a qualitative written response. The test was modified according to the consultants' feedback and the first full assessment was completed in Spring 2004. Two different intervention methods were employed. Some faculty chose to utilize Early Alert and others adopted a faculty advisement system. Exams were coded to determine which of the two interventions were implemented or if the faculty member influenced student learning outcomes. Reassessment was completed in spring '06. Data analysis is pending.

HIGH IMPACT COURSES: 2004 COHORT

TABLE 5
Stages, Courses, and Responsibilities for 2004 LOA Cohort

Stage	Project	Dean	Faculty
3	Introductory Algebra (MATH 082)	Donna Linkszt	* Dave Stewart, Jean Ashby, Robert Brown, Chris Mirbaha, Tejan Tingling
3	Introduction to Environmental Science (ENVS 101)	Donna Linkszt	*Chris Fox, Bill Schockner
2	Human Relations in Cultural Diverse Society (PSYC 105)	Avon Garrett	*Jonathan Grimes, Ira Albert, Dallas Dolan, Sandy Neumann, Alisa Chapman
1	Art Appreciation (ARTS 104)	Steve Tanner	*Sharon Trumbull

MATH 082:

This project involves an instrument that consists of math questions with problem solving and free responses, graded with a three-point scoring rubric assessing the following content areas: systems of equations, polynomials, solving equations, factoring, graphing, solving linear inequality, literal expressions, word problems and simplifying expressions. Math faculty from colleges across Maryland served as consultants for external validation. The first assessment was completed in fall 2004 but was repeated in fall 2005 after cut scores for developmental math were altered. The changed cut scores represent an administrative intervention but pedagogical and curricular interventions will be determined once data analysis from this second assessment has been completed.

ENVS 101:

The ENVS 101 Learning Outcomes Assessment project was conducted during the fall 2005 term across the three campuses of the Community College of Baltimore County. ENVS 101 is a general education course offered through traditional face-to-face and web instruction. The project utilized the 2003 Advanced Placement Environmental Science exam (a 100 question multiple-choice exam) for the assessment. The assessment was administered as the course final exam.

- A total of 19 sections of ENVS 101 ran during the fall 2005 term:
 - 7 Catonsville , 1 Dundalk, 9 Essex and 2 web
- Approximately 450 students (N=448) were enrolled in ENVS 101 at end of the Fall 2005 term covered by the LOA.
 - 132 at Catonsville, 11 at Dundalk, 250 Essex and 55 web
- Two students audited and 3 had incomplete grades. These students are excluded from the grade analysis below. Of the 443 students enrolled, 323 (73%) received a grade of A, B, C in ENVS 101. See Table 1 for the grade distributions.

TABLE 5.1
ENVS 101 Grade Distributions for LOA Term

Grades	Catonsville	Dundalk	Essex	Web	CCBC	All Courses CCBC (Fall 2005)
A-C	78% (102/131)	80% (8/10)	73% (182/248)	57% (31/54)	73% (323/443)	70% (33,272/47,769)
D	4% (5/131)	2% (2/10)	11% (27/248)	11% (6/54)	9% (40/443)	5% (2,449/47,769)
F	11% (14/131)	0% (0)	10% (26/248)	20% (11/54)	12% (51/443)	15% (7,054/47,769)
W	8% (10/131)	0% (0)	5% (13/248)	11% (6/54)	7% (29/443)	10% (4,994/47,769)

TABLE 5.2
Fall 2005 Preliminary Grade distributions for ENVS 101 and All Credit Courses at CCBC

Grades	ENVS 101 Web	ENVS 101 All	All CCBC Credit Web Courses	All CCBC Credit Courses (Fall 2005)
A-C	57% (31/54)	73% (323/443)	56% (1,818/3,214)	70% (33,272/47,769)
D	11% (6/54)	9% (40/443)	5% (147/3,214)	5% (2,449/47,769)
F	20% (11/54)	12% (51/443)	23% (740/3,214)	15% (7,054/47,769)
W	11% (6/54)	7% (29/443)	16% (509/3,214)	10% (4,994/47,769)

Success rates were also examined by ethnicity to determine if certain sub-populations had higher success rates than others. The success rate gap between African-Americans and White students were 33 percentage points at Catonsville, 19 at Essex and 35 for web-based courses.

TABLE 5.3
ENVS 101 Success Rates (A-C) by Student Ethnicity

	Catonsville	Dundalk	Essex	Web	CCBC
African-American	56% (19/34)	NA	59% (26/44)	37% (7/19)	54% (52/97)
White	89% (66/74)	80% (8/10)	77% (141/183)	72% (21/29)	81% (236/296)
Other Minority	91% (11/12)	NA	78% (7/9)	N<5	79% (19/24)
Unknown Ethnicity	55% (6/11)	NA	67% (8/12)	NA	62% (16/26)

TABLE 5.4
Fall 2005 Success Rates (A-C) for ENV5 101 and All Credit Courses at CCBC

	ENV5 101 All	All CCBC Credit Courses
African-American	54%	61%
White	81%	74%
Other Minority	79%	72%
Unknown Ethnicity	62%	70%

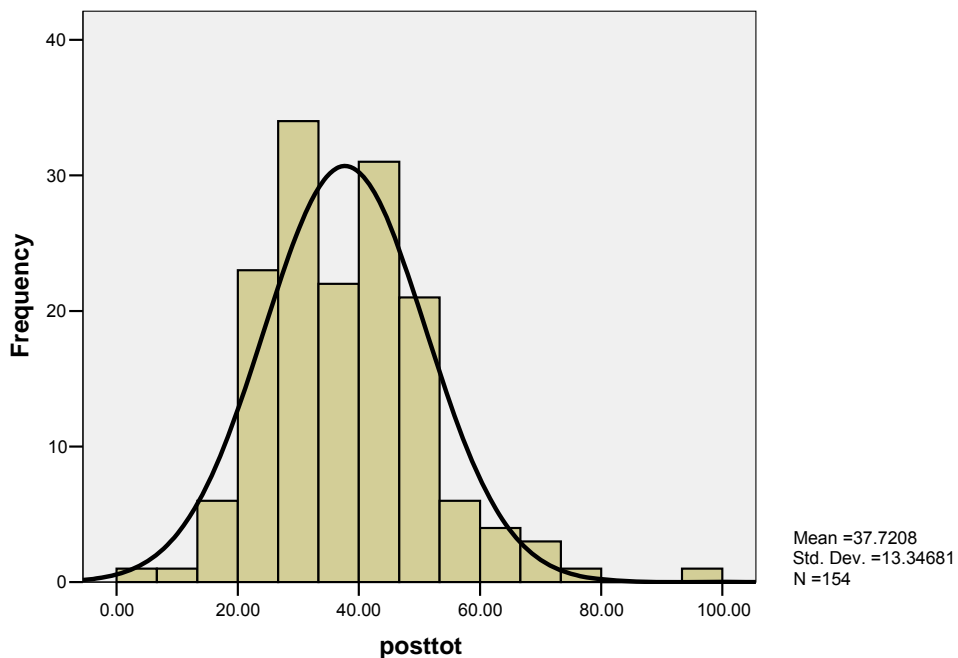
A total of 154 LOA exams were returned to the Office of Planning, Research and Evaluation for scanning. Catonsville sections supplied 70 exams, Dundalk 5, Essex 19 and Web 34. Twenty six (26) exams could not be matched to student identifiable information therefore location could not be determined. LOA sample sizes were 53 percent at Catonsville, 50 percent at Dundalk, 8 percent at Essex and 63 percent from web based sections. Given the fact that only one section ran at Dundalk, analysis of Essex and Dundalk were combined to form the Eastside.

Three exam questions (58, 82 and 98) were not scored based on the AP Exam protocol. However, these questions were graded as correct in this analysis to keep the base at 100.

Total Scores Distribution - CCBC

- Overall, the mean score was 38 out of 100. Of the 154 students tested, only 9 scored a 60 or above (6%). See Figure 1 for a distribution of scores from CCBC.

Figure 1 Total Score Distribution Histogram - CCBC



By Campus

- The mean scores for each location were significantly different; Westside mean 33.1, Eastside mean 40.8 and Web mean 43.4. (See Table 5.5) Figures 2 – 4 demonstrate the distribution of total Fall 2005 post-test scores by campus.

TABLE 5.5
ENVS101 LOA Post-test Mean Scores

Location	Fall 2005		
	Mean	N	Std. Deviation
Westside	33.1	70	10.880
Eastside	40.8	24	10.815
Web	43.4	34	14.499
Unknown	40.0	26	13.189
CCBC	37.7	154	13.346

Figure 2 Total Score Distribution Histogram - Eastside

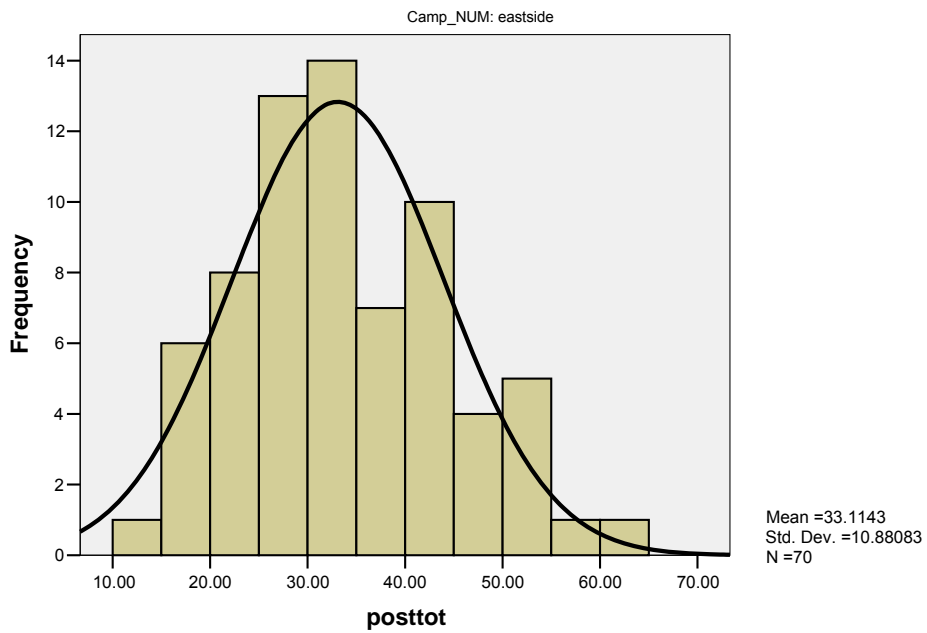


Figure 3 Total Score Distribution Histogram - Westside

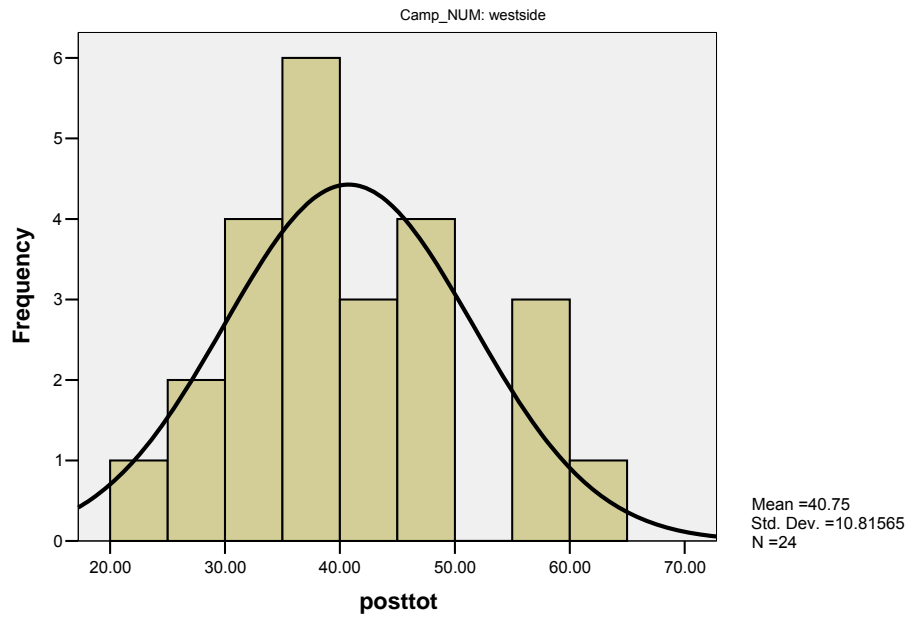
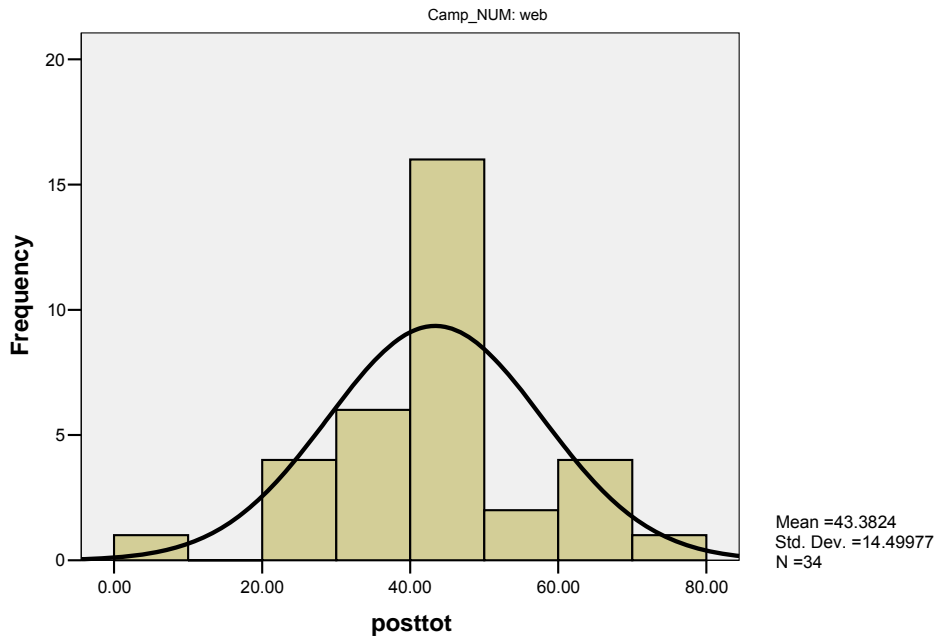


Figure 4 Total Score Distribution Histogram - Web



Analysis of post-test total scores was also compiled by ethnicity (See Table 5.6). Further breakdown by location was not compiled due to small N issues. The mean scores between ethnic groups did not vary significantly.

TABLE 5.6
Post-Test LOA Matched Pair Mean Scores by Demographic Characteristics

Race recode	N	Minimum	Maximum	Mean	Std. Deviation
African American	30	5.00	63.00	32.3000	11.29281
Other minority	7	30.00	63.00	42.8571	10.65252
white	83	13.00	75.00	37.8916	12.96620
other/unknown	34	20.00	97.00	41.0294	15.22455

TABLE 5.7
Energy Flows, Forms and Conversions
(Mean 2.3 correct out of 7 – 33%)

Number Correct Responses	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .00	15	9.7	9.7	9.7
1.00	31	20.1	20.1	29.9
2.00	38	24.7	24.7	54.5
3.00	44	28.6	28.6	83.1
4.00	20	13.0	13.0	96.1
5.00	4	2.6	2.6	98.7
6.00	1	.6	.6	99.4
7.00	1	.6	.6	100.0
Total	154	100.0	100.0	

TABLE 5.8
 Biological Processes, Nutrient Cycles and Biodiversity
 (Mean 8.5 correct out of 22 – 39%)

Number Correct Responses	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1.00	1	.6	.6	.6
2.00	1	.6	.6	1.3
3.00	7	4.5	4.5	5.8
4.00	10	6.5	6.5	12.3
5.00	9	5.8	5.8	18.2
6.00	15	9.7	9.7	27.9
7.00	22	14.3	14.3	42.2
8.00	19	12.3	12.3	54.5
9.00	14	9.1	9.1	63.6
10.00	18	11.7	11.7	75.3
11.00	12	7.8	7.8	83.1
12.00	8	5.2	5.2	88.3
13.00	8	5.2	5.2	93.5
14.00	2	1.3	1.3	94.8
15.00	3	1.9	1.9	96.8
16.00	2	1.3	1.3	98.1
18.00	1	.6	.6	98.7
20.00	1	.6	.6	99.4
22.00	1	.6	.6	100.0
Total	154	100.0	100.0	

TABLE 5.9
 Physical Earth and Processes
 (Mean 4.7 correct out of 14 – 34%)

Number Correct Responses	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .00	1	.6	.6	.6
1.00	7	4.5	4.5	5.2
2.00	13	8.4	8.4	13.6
3.00	25	16.2	16.2	29.9
4.00	30	19.5	19.5	49.4
5.00	32	20.8	20.8	70.1
6.00	18	11.7	11.7	81.8
7.00	14	9.1	9.1	90.9
8.00	6	3.9	3.9	94.8
9.00	4	2.6	2.6	97.4
10.00	3	1.9	1.9	99.4
14.00	1	.6	.6	100.0
Total	154	100.0	100.0	

TABLE 5.10
Health and Pollution
(Mean 11.3 correct out of 27 – 42%)

Number Correct Responses		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	1	.6	.6	.6
	3.00	3	1.9	1.9	2.6
	4.00	4	2.6	2.6	5.2
	5.00	9	5.8	5.8	11.0
	6.00	12	7.8	7.8	18.8
	7.00	9	5.8	5.8	24.7
	8.00	11	7.1	7.1	31.8
	9.00	15	9.7	9.7	41.6
	10.00	7	4.5	4.5	46.1
	11.00	9	5.8	5.8	51.9
	12.00	8	5.2	5.2	57.1
	13.00	10	6.5	6.5	63.6
	14.00	16	10.4	10.4	74.0
	15.00	12	7.8	7.8	81.8
	16.00	8	5.2	5.2	87.0
	17.00	6	3.9	3.9	90.9
	18.00	3	1.9	1.9	92.9
	19.00	3	1.9	1.9	94.8
	20.00	4	2.6	2.6	97.4
	21.00	2	1.3	1.3	98.7
	22.00	1	.6	.6	99.4
	27.00	1	.6	.6	100.0
	Total	154	100.0	100.0	

TABLE 5.11
Human Population and Resource Use
(Mean 7.5 correct out of 19 – 39%)

Number Correct Responses	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .00	1	.6	.6	.6
1.00	2	1.3	1.3	1.9
2.00	7	4.5	4.5	6.5
3.00	6	3.9	3.9	10.4
4.00	16	10.4	10.4	20.8
5.00	14	9.1	9.1	29.9
6.00	13	8.4	8.4	38.3
7.00	17	11.0	11.0	49.4
8.00	25	16.2	16.2	65.6
9.00	14	9.1	9.1	74.7
10.00	11	7.1	7.1	81.8
11.00	10	6.5	6.5	88.3
12.00	6	3.9	3.9	92.2
13.00	4	2.6	2.6	94.8
14.00	3	1.9	1.9	96.8
15.00	1	.6	.6	97.4
16.00	3	1.9	1.9	99.4
19.00	1	.6	.6	100.0
Total	154	100.0	100.0	

TABLE 5.12
Economics, Environmental Laws and Issues for Society
(Mean 5.1 correct out of 14 – 36%)

Number Correct Responses	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .00	2	1.3	1.3	1.3
1.00	7	4.5	4.5	5.8
2.00	12	7.8	7.8	13.6
3.00	21	13.6	13.6	27.3
4.00	26	16.9	16.9	44.2
5.00	23	14.9	14.9	59.1
6.00	20	13.0	13.0	72.1
7.00	16	10.4	10.4	82.5
8.00	9	5.8	5.8	88.3
9.00	10	6.5	6.5	94.8
10.00	6	3.9	3.9	98.7
11.00	1	.6	.6	99.4
14.00	1	.6	.6	100.0
Total	154	100.0	100.0	

TABLE 5.13
 Quantitative/Calculations
 (Mean 1.8 correct out of 7 – 26%)

Number Correct Responses	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .00	30	19.5	19.5	19.5
1.00	45	29.2	29.2	48.7
2.00	32	20.8	20.8	69.5
3.00	24	15.6	15.6	85.1
4.00	16	10.4	10.4	95.5
5.00	5	3.2	3.2	98.7
6.00	1	.6	.6	99.4
7.00	1	.6	.6	100.0
Total	154	100.0	100.0	

TABLE 5.14
 Graph Interpretation
 (Mean 3.4 correct out of 9 – 38%)

Number Correct Responses	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .00	11	7.1	7.1	7.1
1.00	18	11.7	11.7	18.8
2.00	24	15.6	15.6	34.4
3.00	35	22.7	22.7	57.1
4.00	21	13.6	13.6	70.8
5.00	19	12.3	12.3	83.1
6.00	13	8.4	8.4	91.6
7.00	7	4.5	4.5	96.1
8.00	4	2.6	2.6	98.7
9.00	2	1.3	1.3	100.0
Total	154	100.0	100.0	

Comparisons for each of the subsections could be made to the mean in the 2003 AP exam. The comparisons are in Table 5. 15.

TABLE 5.15
Comparison of means between 2003 AP exam and ENV5 LOA Exam

Subject	2003 AP Exam Mean (%)	ENV5 LOA Exam Mean (%)
Energy Flows	42	33
Biological Processes	56	39
Physical Processes	49	34
Health and Pollution	59	42
Human Population	57	39
Issues for Society	49	36
Quantitative/Calculations	44	26
Graphing	61	38

PSYC 105:

The Psychology 105 LOA project employed a pre and post- test design to assess student learning in the course “Human Relations in a Culturally Diverse Society.” A prompt and scoring rubric were designed in-house and sent to two professors at Maryland colleges to provide external validation. An initial baseline of information was gathered during the spring 2005 semester by implementing and scoring the instrument in a random sampling of PSYC 105 classes. The team revised the prompt and rubric based on feedback from the consultants and results from the pilot semester. The first full assessment was completed during the spring 2006 semester. Data collection and analysis are pending.

ARTS 104:

The LOA instrument includes a post exam using either PPT or traditional slides and an accompanying multiple-choice exam. The test will indicate students’ progress in specific content areas as follows: Formal Elements of Art, Media Used in Art Making, Styles and Historical Influences, Cultural and Social Influences in Art, Analysis of Art/ Theories of Art Criticism, and Identifying Resources for Art / Galleries, Museums. The test will consist of twenty-five multiple-choice questions, fifteen of which will be accompanied by a visual component. It will be available to instructors in two formats, both a Power Point version, and a printed option with provided slides. The exam was piloted during the fall 2005 and spring 2006 semesters. The first full assessment is scheduled for fall 2006.

HIGH IMPACT COURSES: 2005 COHORT

TABLE 6
Stages, Courses, and Responsibilities for 2005 LOA Cohort

Stage	Project	Dean	Faculty
1	Basic Reading RDNG 051)	<i>Steve Tanner</i>	*Joan Hellman, Martha Lippy, Charlyn Cassady
1	Introduction to Physical Geography (GEOG 101)	<i>Donna Links</i>	*Scott Jeffrey
1	Introduction to Macro-Economics (ECON 201)	<i>Avon Garrett</i>	*Jennifer Joyner
1	Introduction to Women’s Studies (WMST 101)	<i>Avon Garrett</i>	*Ingrid Sabio
2	Introduction to Criminal Justice (CRJU 101)	<i>Beth Barker</i>	*Michelle Jones, Linda Fleischer, Jay Zumbrun

RDNG 051:

The development of the LOA instruments and RFP are currently underway. The faculty team is intending to use a combination of tools including a standardized reading exam and an in-house designed assignment accompanied by the use of a control and an experimental group in terms of reading materials. The pilot for the standardized exam is scheduled for fall 2006 with the first full assessment scheduled for spring ‘07.

GEOG 101:

The initial meeting occurred and development of the LOA instrument and RFP are currently underway. The pilot is scheduled for fall 2006 with first full assessment scheduled for spring ‘07.

ECON 101:

Initial meeting occurred. Development of LOA instrument and RFP currently underway. Pilot scheduled for fall 2006 with first full assessment scheduled for spring ‘07.

WMST 101:

This project will use a pre-test/ post-test experimental design to assess student mastery in Introduction to Women's Studies. The evaluation will indicate how well students have achieved in specific content areas such as the history of the women's movement, global feminism, gender inequity in the paid and unpaid labor force, gendered violence, impact of popular culture on beauty ideals, and the feminization of poverty. The assessment instrument is comprised of 5 identification questions and 15 short answer questions. The maximum score for each student is 60 points. Each instructor will be given an answer key and scoring grid. Scores of the pre-test and post-test will be compared at the end of the semester to ascertain how much the students have learned throughout the course of the semester. Faculty from Anne Arundel Community College and Towson University will serve as consultants to provide external validation. The pilot is scheduled for fall 2006 with the first full assessment scheduled for spring '07.

CRJU 101:

The first assessment was administered during fall 2005. The assessment instrument consists of a pre/post multiple-choice exam developed by the Maryland Criminal Justice Articulation Task Force (MCJATF). The assessment data was combined with other student information such as grades and demographics, to provide a comprehensive representation of the students.

- A total of seven sections of CRJU 101 ran during the Fall 2005 term:
 - Two at Catonsville, two at Dundalk, two at Essex and one online course
- A total of 173 students were enrolled in CRJU 101 and 166 were awarded grades by the beginning of May 2006
 - Of the 166 students award grades 92 (55%) were Caucasian/White, 53 (32%) were African-American/Black and 21 (13%) were from other ethnic groups
 - The majority (67%) of the students ranged in age from 18 to 24 years old
 - Seventy-four percent (74%) of the students successfully completed the course with a grade of A-D (Table 1)
 - The grade distribution for online courses was very different from the other courses. Only 42% of students successfully completed the online course while 46% received a grade of F and 12% withdrew from the course
 - Eighty-five percent (85%) of online courses were taken by students ranging in age from 20 to 39 years old

TABLE 6.1
Criminal Justice 101 Grade Distributions by percent and number, in parentheses, for Fall 2005

Grades	Catonsville	Dundalk	Essex	Online	CCBC
A-D	71% (41)	92% (22)	83% (48)	42% (11)	74% (122)
F	22% (13)	4% (1)	14% (8)	46% (12)	20% (34)
W	6% (4)	4% (1)	3% (2)	12% (3)	6% (10)

At CCBC, 72% of African-American students and 76% of Caucasian students successfully completed CRJU 101 with a grade of A-D (Table 2).Caucasian students successfully completed online courses at a rate of 36% (grade of A-D) and 60% of African-American students received a grade of A-D.

TABLE 6.2
Criminal Justice 101 Grade distributions for Fall 2005 by ethnicity and campus
(number of students in parentheses) **

Ethnicity	Grades	Catonsville	Dundalk	Essex	Online	CCBC
African-American	A-D	69% (20)	100% (5)	78% (7)	60% (6)	72% (38)
	F	24% (7)	0	22% (2)	30% (3)	23% (12)
	W	7% (2)	0	0	10% (1)	6% (3)
Caucasian	A-D	72% (18)	86% (12)	86% (36)	36% (4)	76% (70)
	F	24% (6)	7% (1)	9% (4)	46% (5)	17% (16)
	W	4% (1)	7% (1)	5% (2)	18% (2)	7% (6)
Other groups	A-D	75% (3)	100% (5)	71% (5)	NA	67% 14)
	F	NA	NA	29% (2)	20% (1)	29% (6)
	W	25% (1)	NA	NA	80% (4)	5% (1)

Summary of students participating in the LOA project

- All seven sections in CRJU 101 participated in the Fall 2005 LOA project
- A total of 166 students received grades in these courses. However, only 103 students completed both the pre and post assessment test
- Of the 103 students, 58 (56%) were Caucasian/White, 37 (36%) were African-American/Black and 8 (8%) were from other ethnic groups
- In addition, 56 female students and 47 male students completed both the pre and post-test
- Of the student completing both the pre and post-test, 85% successfully completed the course with a grade of A-D, 12% received a grade of F and 3% withdrew from the course
- Eighty-nine percent (89%) of female students and 82% of male students successfully completed the course while 13% of males and 9% of females received a grade of F

Summary of the pre and post-test results

- On the pre-test students on average scored 39% (\underline{M} =31.21) of the items correctly and significantly increased to an average of 53% (\underline{M} =42.64) correct on the post-test ($p < .05$)
- Both African-American and Caucasian students scored higher on the post-test than on the pre-test (see Table 3)
- As shown in Table 3, Caucasian students performed significantly higher (\underline{M} =44.13) than African-American (\underline{M} =38.92) students on the post-test but their mean scores on the pretest were very similar (\underline{M} =31.84 and \underline{M} =31.12)
- On average male students scored higher than female students on both the pretest and the post-test but they were not significantly different from each other (see Figure 1)

TABLE 6.3

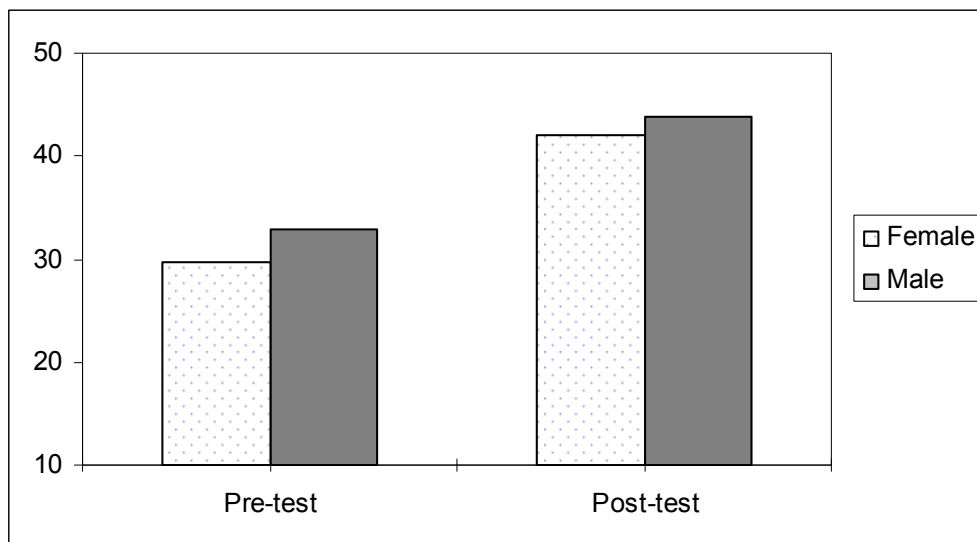
Mean number correct on the pre and post-test by gender and ethnicity for Fall 2005

Gender	Ethnicity	Number of students	Pre-test Mean (M) correct score	Post-test Mean (M) correct score	% Change
Female	African-American	29	30.21	38.07	26%
	Caucasian/White	24	29.50	45.17	53%
	Other Students	3	30.67	49.00	60%
Total Females		56	29.93	41.70	39%
Male	African-American	8	37.75	42.00	11%
	Caucasian/White	34	32.26	44.56	38%
	Other Students	5	28.00	41.2	47%
Total Males		47	32.74	43.77	34%
Overall	African-American	37	31.84	38.92	22%
	Caucasian/White	58	31.12	44.81*	44%
	Other Students	8	29.00	44.13	52%
All Students		103	31.21 (39%)	42.64* (53%)	37%

*significant difference between groups ($p < .05$)

FIGURE 6.1

Mean score on the pre and post-test by gender



The Dundalk campus was not represented in the analysis by location due to lack of data (Table 4). The analysis revealed that the location (Catonsville, Essex, Online) of the course significantly affected the scores on the pre-test but had no effect on student scores on the post-test, which suggests that students received the same information at all locations. Students on the Catonsville campus scored significantly higher than students at the other locations on the pretest while there were no differences between locations on the post-test. Students on the Essex campus experienced the largest change in scores from the pre-test to the post-test (71%).

TABLE 6.4
Mean score on the pre-test and post-test by location

Location	Number of students	Pre-test Mean correct score	Post-test Mean correct score	% Change
Catonsville	44	38.00* (48%)	41.16 (51%)	8%
Essex	49	26.00 (33%)	44.37 (55%)	71%
Online	10	26.90 (34%)	40.70 (51%)	51%

*indicates significant difference between locations ($p < .05$)

The majority (70%) of students completing both the pre and post-test ranged in age from 18 to 24 years old (Table 5). Students in the age range of 40 and higher and less than 18 years old showed the largest increase in mean scores from the pre-test to the post-test results, 82% and 70% respectively.

TABLE 6.5
Mean score on the pre-test and post-test by age range

Age range	Number of students	Pre-test Mean correct score	Post-test Mean correct score	% Change
Less than 18	5	25.40 (32%)	43.20 (54%)	70%
18-19	44	30.89 (37%)	39.91 (50%)	29%
20-24	29	31.55 (32%)	44.97 (56%)	43%
25-29	9	35.22 (44%)	45.67 (57%)	30%
30-39	9	34.78 (43%)	41.00 (51%)	18%
40 and more	7	26.29 (33%)	48.00 (60%)	82%
Overall	103	31.21 (39%)	42.64* (53%)	37%

*indicates significant difference between groups ($p < .05$)

COURSE OBJECTIVES ANALYSIS

- An analysis of student scores by course objectives revealed that students performed significantly better on the post-test than on the pre-test on a majority of the objectives (Table 6)
- Objectives pertaining to the history of correction (15), alternative sentences (17), criminal justice system (18), employment opportunities (19) and terrorism (20) experienced a significant reduction ($p < .05$) in mean scores on the post-test when compared to the pre-test
- This suggests that the students had some knowledge of these topics prior to taking the course and that the wording of these questions may be flawed
- A further examination of the effect of course location on mean scores on each objective indicated that location (i.e., Catonsville, Essex and Online) had a significant effect on the student mean scores
- There was a significant effect of location on the mean scores on the pre-test for the following objectives: 6, 7, 8, 9, 10, and 12 thru 19
- Students at the Catonsville campus obtained significantly higher scores on objectives 6-10 and 12 thru 19 than others at Essex and those enrolled in the online section on the pre-test
- On the post-test location had only a significant effect on student performance for objectives one, 11 and 20
- Essex students performed significantly higher on the post-test on these objectives than students at Catonsville and those enrolled in the online section (Table 7)
- Consistent with the overall analysis males scored higher on most objectives than female student on both pre and post-test (see Table 8)
- Objective 18 was particularly problematic for both male and female students resulting in a significant reduction in mean scores in the post-test
- Further examination of the data to determine the effect of ethnicity on student performance for each objective revealed that ethnicity had no effect on performance by objective on the pre-test (Table 9)
- All students regardless of ethnicity performed similarly on each objective on the pre-test
- Caucasian students performed significantly better than African-American students on objectives one and 10 on the post-test
- Included in Table 10 is an analysis by gender and ethnicity to further examine the effects these categories may have on performance on each objective

SUMMARY

When comparing the results of the pre-test to those of the post-test student scores significantly improved overall. The improvement occurred for most of the objectives but some objectives experienced a significant drop in scores. The location of the course also significantly affected the scores of students but only on the pre-test. This suggests that the CRJU 101 curriculum was being administered similarly across campuses with the exception of Dundalk for which there was no data.

TABLE 6.6
Mean and percent correct by course objective

Objectives	Description of the objective	Number of Items	Mean Scores and Percent Correct on the Pre-test	Mean Scores and Percent Correct on the Post-test	Mean % Change: negative (-) or positive
1	Definition of Crime	4	3.13 (78%)	3.41* (85%)	8%
2	Description of administration of Justice	4	1.88 (47%)	2.27* (57%)	21%
3	Examination of crime statistics	4	2.92 (73%)	3.54* (89%)	21%
4	Methods of research	4	2.77 (69%)	3.31* (83%)	19%
5	Crime control vs. due process	4	1.72 (43%)	2.14* (53%)	24%
6	Major crime causation theories	4	1.18 (30%)	1.89* (47%)	60%
7	Substantive and procedural criminal law	4	1.14 (28%)	3.35* (84%)	193%
8	Criminal defenses	4	0.65 (16%)	1.98* (50%)	204%
9	Identification of the 4 th , 5 th , 6 th , 8 th and 14 th amendments	4	0.77 (19%)	2.50* (62%)	225%
10	Search and seizure, exclusionary ruling	4	1.19 (30%)	2.61* (65%)	119%
11	History and functions of the police	4	1.42 (35%)	1.77* (44%)	25%
12	Policy issues and trends	4	1.12 (28%)	3.00* (75%)	168%
13	Adult trial and post-trial process	4	1.07 (27%)	3.01* (75%)	181%
14	State vs. federal court jurisdiction	4	1.46 (36%)	1.94* (49%)	33%
15	History and function of corrections	4	1.61* (40%)	0.83 (21%)	-48%
16	Juvenile court proceedings	4	0.90 (23%)	2.07* (52%)	130%
17	Evaluate standardized and alternative sentences	4	1.11* (28%)	0.50 (12%)	-55%
18	Criminal justice system	4	0.75* (19%)	0.26 (7%)	-65%
19	Employment opportunities in criminal justice field	4	1.82* (45%)	1.16 (29%)	-36%
20	Types of terrorism	4	2.62* (66%)	1.11 (28%)	-58%

*indicates significant difference $p < .05$

TABLE 6.7
Mean scores on the pre and post-test by location and by course objective

Objective	Pre and Post	Catonsville Mean Scores	Essex Mean Scores	Online Mean Scores
1	Pre-test	3.07	3.18	3.10
	Post-test	3.16*	3.71	3.00
2	Pre-test	1.64	1.96	2.60*
	Post-test	2.25	2.18	2.80
3	Pre-test	2.84	2.90	3.40
	Post-test	3.43	3.67	3.40
4	Pre-test	2.64	2.82	3.10
	Post-test	3.36	3.24	3.40
5	Pre-test	1.73	1.67	1.90
	Post-test	1.98	2.31	2.00
6	Pre-test	1.52*	0.98	0.70
	Post-test	1.98	1.86	1.70
7	Pre-test	1.07*	0.35	0.30
	Post-test	1.98	1.94	2.20
8	Pre-test	2.09*	0.49	0.10
	Post-test	3.52	3.20	3.30
9	Pre-test	1.36*	0.33	0.30
	Post-test	2.41	2.47	3.00
10	Pre-test	1.80*	0.80	0.50
	Post-test	2.59	2.63	2.60
11	Pre-test	1.25	1.55	1.50
	Post-test	1.77	1.94*	0.90
12	Pre-test	1.95*	0.45	0.70
	Post-test	2.77	3.29	2.60
13	Pre-test	2.27*	0.18	0.10
	Post-test	2.66	3.33	3.00
14	Pre-test	1.77*	1.24	1.10
	Post-test	1.70	2.14	2.00
15	Pre-test	1.95*	1.37	1.30
	Post-test	0.82	0.88	0.70
16	Pre-test	1.18*	0.76	0.40
	Post-test	1.91	2.22	2.00
17	Pre-test	1.48*	0.76	1.20
	Post-test	0.55	0.47	0.40
18	Pre-test	1.55*	0.18	0.00
	Post-test	0.25	0.27	0.30
19	Pre-test	2.32*	1.41	1.60
	Post-test	1.05	1.31	0.90
20	Pre-test	2.52	2.63	3.00
	Post-test	1.02	1.31*	0.50

*indicates significant difference between groups ($p < .05$)

TABLE 6.8
Mean scores on the pre and post-test by gender and course objective

Objective	Pre and Post test	Mean Scores for Males	Mean Scores for Females
1	Pre-test	3.23	3.04
	Post-test	3.55	3.29
2	Pre-test	2.04	1.75
	Post-test	2.34	2.21
3	Pre-test	2.96	2.89
	Post-test	3.62	3.48
4	Pre-test	2.94	2.63
	Post-test	3.36	3.27
5	Pre-test	1.74	1.70
	Post-test	2.30	2.00
6	Pre-test	1.26	1.13
	Post-test	1.98	1.82
7	Pre-test	0.68	0.63
	Post-test	2.09	1.89
8	Pre-test	1.23	1.05
	Post-test	3.28	3.41
9	Pre-test	0.64	0.88
	Post-test	2.57	2.43
10	Pre-test	1.32	1.09
	Post-test	2.79	2.46
11	Pre-test	1.49	1.36
	Post-test	1.87	1.68
12	Pre-test	1.15	1.09
	Post-test	2.98	3.02
13	Pre-test	1.17	0.98
	Post-test	3.09	2.95
14	Pre-test	1.64	1.30
	Post-test	1.96	1.93
15	Pre-test	1.64	1.59
	Post-test	0.89	0.79
16	Pre-test	1.04	0.79
	Post-test	2.19	1.96
17	Pre-test	1.13	1.09
	Post-test	0.47	0.52
18	Pre-test	0.87	0.64
	Post-test	0.21	0.30
19	Pre-test	1.96	1.70
	Post-test	1.17	1.14
20	Pre-test	2.62	2.63
	Post-test	1.06	1.14

TABLE 6.9
Mean scores on the pre and post-test by ethnicity and course objective

Objective	Pre and Post test	Mean Scores for African-Americans	Mean Scores for Caucasians	Mean Scores for Other groups
1	Pre-test	2.92	3.28	3.00
	Post-test	2.92	3.66	3.88
2	Pre-test	1.81	1.97	1.63
	Post-test	2.27	2.31	2.00
3	Pre-test	2.89	2.91	3.13
	Post-test	3.35	3.66	3.63
4	Pre-test	2.57	2.95	2.38
	Post-test	3.22	3.41	3.00
5	Pre-test	1.49	1.90	1.50
	Post-test	1.81	2.28	2.63
6	Pre-test	1.19	1.17	1.25
	Post-test	1.68	1.98	2.25
7	Pre-test	0.84	0.53	0.63
	Post-test	1.81	2.09	2.00
8	Pre-test	1.32	1.05	0.88
	Post-test	3.27	3.40	3.38
9	Pre-test	0.97	0.67	0.50
	Post-test	2.32	2.52	3.13
10	Pre-test	1.32	1.12	1.13
	Post-test	2.11	2.91	2.75
11	Pre-test	1.32	1.48	1.38
	Post-test	1.51	1.93	1.75
12	Pre-test	1.24	1.03	1.13
	Post-test	2.65	3.22	3.00
13	Pre-test	1.35	0.93	0.75
	Post-test	2.65	3.26	2.88
14	Pre-test	1.38	1.52	1.38
	Post-test	1.68	2.12	1.88
15	Pre-test	1.70	1.53	1.75
	Post-test	0.76	0.88	0.88
16	Pre-test	0.89	0.93	0.75
	Post-test	1.86	2.22	1.88
17	Pre-test	1.14	1.12	0.88
	Post-test	0.54	0.45	0.63
18	Pre-test	0.84	0.66	1.00
	Post-test	0.27	0.26	0.25
19	Pre-test	1.89	1.76	1.88
	Post-test	1.16	1.10	1.50
20	Pre-test	2.76	2.60	2.13
	Post-test	1.08	1.16	0.88

TABLE 6.10

Displays mean scores on the pre and post-test by gender, ethnicity and objective

Gender	Ethnicity	Objective 1		Objective 2		Objective 3		Objective 4		Objective 5		Objective 6	
		Mean Pre	Mean Post	Mean Pre	Mean Post	Mean Pre	Mean Post	Mean Pre	Mean Post	Mean Pre	Mean Post	Mean Pre	Mean Post
Male	African-American	2.75	2.75	1.75	2.75	2.75	3.38	3.00	3.75	1.63	2.25	1.50	1.88
	Caucasian/White	3.35	3.71	2.24	2.26	2.97	3.68	3.00	3.35	1.88	2.32	1.26	1.97
	All other groups	3.20	3.80	1.20	2.20	3.20	3.60	2.40	2.80	1.00	2.20	0.80	2.20
Female	African-American	2.97	2.97	1.83	2.14	2.93	3.34	2.45	3.07	1.45	1.69	1.10	1.62
	Caucasian/White	3.17	3.58	1.58	2.38	2.83	3.63	2.88	3.50	1.92	2.21	1.04	2.00
	All other groups	2.67	4.00	2.33	1.67	3.00	3.67	2.33	3.33	2.33	3.33	2.00	2.33
Overall	African-American	2.92	2.92	1.81	2.27	2.89	3.35	2.57	3.22	1.49	1.81	1.19	1.68
	Caucasian/White	3.28	3.66	1.97	2.31	2.91	3.66	2.95	3.41	1.90	2.28	1.17	1.98
	All other groups	3.00	3.88	1.63	2.00	3.13	3.63	2.38	3.00	1.50	2.63	1.25	2.25

TABLE 10
Continued

Gender	Ethnicity	Objective 7		Objective 8		Objective 9		Objective 10		Objective 11		Objective 12	
		Mean Pre	Mean Post	Mean Pre	Mean Post	Mean Pre	Mean Post	Mean Pre	Mean Post	Mean Pre	Mean Post	Mean Pre	Mean Post
Male	African-American	1.38	2.13	2.00	3.38	0.88	2.75	1.88	2.25	1.50	1.75	1.50	2.63
	Caucasian/White	0.53	2.12	1.12	3.29	0.59	2.47	1.21	2.94	1.50	1.91	1.06	3.15
	All other groups	0.60	1.80	0.80	3.00	0.60	3.00	1.20	2.60	1.40	1.80	1.20	2.40
Female	African-American	0.69	1.72	1.14	3.24	1.00	2.21	1.17	2.07	1.28	1.45	1.17	2.66
	Caucasian/White	0.54	2.04	0.96	3.54	0.79	2.58	1.00	2.88	1.46	1.96	1.00	3.33
	All other groups	0.67	2.33	1.00	4.00	0.33	3.33	1.00	3.00	1.33	1.67	1.00	4.00
Overall	African-American	0.84	1.81	1.32	3.27	0.97	2.32	1.32	2.11	1.32	1.51	1.24	2.65
	Caucasian/White	0.53	2.09	1.05	3.40	0.67	2.52	1.12	2.91	1.48	1.93	1.03	3.22
	All other groups	0.63	2.00	0.88	3.38	0.50	3.13	1.13	2.75	1.38	1.75	1.13	3.00

TABLE 10
Continued

Gender	Ethnicity	Objective 13		Objective 14		Objective 15		Objective 16		Objective 17		Objective 18	
		Mean Pre	Mean Post	Mean Pre	Mean Post	Mean Pre	Mean Post	Mean Pre	Mean Post	Mean Pre	Mean Post	Mean Pre	Mean Post
Male	African-American	2.38	3.00	1.88	2.13	1.88	0.75	1.00	2.00	1.00	0.25	1.38	0.25
	Caucasian/White	0.97	3.21	1.62	2.00	1.53	0.94	1.06	2.32	1.18	0.47	0.79	0.21
	All other groups	0.60	2.40	1.40	1.40	2.00	0.80	1.00	1.60	1.00	0.80	0.60	0.20
Female	African-American	1.07	2.55	1.24	1.55	1.66	0.76	0.86	1.83	1.17	0.62	0.69	0.28
	Caucasian/White	0.88	3.33	1.38	2.29	1.54	0.79	0.75	2.08	1.04	0.42	0.46	0.33
	All other groups	1.00	3.67	1.33	2.67	1.33	1.00	0.33	2.33	0.67	0.33	1.67	0.33
Overall	African-American	1.35	2.65	1.38	1.68	1.70	0.76	0.89	1.86	1.14	0.54	0.84	0.27
	Caucasian/White	0.93	3.26	1.52	2.12	1.53	0.88	0.93	2.22	1.12	0.45	0.66	0.26
	All other groups	0.75	2.88	1.38	1.88	1.75	0.88	0.75	1.88	0.88	0.63	1.00	0.25

TABLE 10
Continued

Gender	Ethnicity	Objective 19		Objective 20	
		Mean Pre	Mean Post	Mean Pre	Mean Post
Male	African-American	2.75	1.13	3.00	0.88
	Caucasian/White	1.79	1.09	2.62	1.15
	All other groups	1.80	1.80	2.00	0.80
Female	African-American	1.66	1.17	2.69	1.14
	Caucasian/White	1.71	1.13	2.58	1.17
	All other groups	2.00	1.00	2.33	1.00
Total	African-American	1.89	1.16	2.76	1.08
	Caucasian/White	1.76	1.10	2.60	1.16
	All other groups	1.88	1.50	2.13	0.88

MULTIPLE SECTION COURSE LOA

CCBC is currently supporting a multi-section LOA project in Paralegal Studies (PLAW 101). The initial orientation meeting occurred and the assessment instrument development is underway.

Completed LOA projects

Course	Level	General Findings
RDNG 052	3	By incorporating a computer lab-based approach that had been successful on one campus to all campuses, student reading levels increased significantly from first to second assessment.
CHEM 122	2	Additional lab activities were incorporated into the original lab program to address areas of assessed weaknesses. Demonstrated lab skills improved significantly in the subsequent assessment.
CHEM 108	2	The CHEM 108 faculty created an in-house lab manual to directly support the needs of the students. This resulted in a significant improvement of lab skills on an exit performance exam on one campus. Plans are to extend this effort to the other campuses.
ENGL 052	3	English 052 faculty participated in a professional development workshop by a grammar expert, used a book with sources, and collaborated with the CTG committees to establish ways to improve African American performance. Improvements in student achievement varied by campus and by writing components. Plans are to investigate more targeted interventions.
HLTH 101	3	Health faculty focused on improving communications with students through the Early Alert program, email contact, attendance monitoring, and using hands on class activities. Students improved significantly between assessments and the achievement gap on the LOA instrument was closed.
PEFT 101	3	Similar techniques as were used with the HLTH LOA were utilized. Although student achievement improved, the achievement gap widened. The PEFT faculty intend to pursue a more formal and coordinated intervention to close the gap and improve retention.
MATH 083	3	Project used an internally designed and externally validated pre and post-test. Administrative interventions included the change from pass/fail to letter grades. Subsequent testing occurred but so did multiple administrative and curricular interventions. Therefore, this course will be reassessed at a later date using the five stages.

CONCLUSION

CCBC uses the LOA projects to document valid and reliable data regarding student learning outcomes. This data is translated into viable ways to expand and improve learning. The formative nature of these projects encourages creativity and innovation in developing new teaching strategies. Curricular, pedagogical, and administrative interventions may be implemented as appropriate to enhance the learning process for CCBC students. Learning Outcomes Assessment projects produce a continuous reflection of the progress the college is making toward meeting its strategic directions.

GENERAL EDUCATION OUTCOMES ASSESSMENT ANNUAL REPORT

PREPARED BY:
PAULETTE COMET

MAY 2006

INTRODUCTION

The purpose of the General Education Assessment Teams (GREAT) Project is to implement Common Graded Assignments (CGAs) and accompanying scoring rubrics designed by faculty teams in General Education courses across disciplines to gather data to assess the first six General Education Program Goals. The third full implementation of the Project took place in fall 2005 with 26 courses within Biological and Physical Sciences General Education category participation. In spring 2006 all sections of English 102, an English composition course will participate in the GREAT Project.

GOALS AND ASSESSMENT

The General Education Goals that were assessed are as follows. The phrases in bold that follow each goal are the abbreviated terms that are included in the CGA rubric form.

1. Introduce students to the fundamental principles, concepts, vocabulary, and methods essential for the acquisition of knowledge and skills basic to the field of study; **(Content, Knowledge, and/or Skills)**
2. Prepare students to communicate effectively using written and oral or signed communication skills; **(Written, Oral, and/or Signed Communication Skills)**
3. Provide a variety of learning experiences that encourage students, independently and in collaboration with others, to use those fundamental principles and methods to acquire, analyze, and use information for purposes of inquiry, critical thinking, problem-solving, and creative expression in a diverse environment; **(Critical Thinking Skills)**
4. Prepare students to adapt to change, including the increasing integration of information technology in all fields of knowledge and expression; **(Technology as a Learning Tool)**
5. Provide students with the knowledge and skills to understand themselves and others from various cultural, social, aesthetic, political, and environmental perspectives; **(Cultural Appreciation);** and
6. Provide the experiences that will allow students to become independent learners, the skills to analyze their strengths and weaknesses as learners, and the knowledge to accomplish the tasks involved in learning. **(Independent Learning Skills)**

The seventh program goal, that all General Education courses “use appropriate assessment tool(s) to demonstrate the degree to which students have achieved the objectives of the course,” is an overarching requirement for all General Education courses and thus is not included as a Program goal for the purpose of the GREAT Project. The first six goals focus on what and how students are learning in the classroom.

PROJECT IMPLEMENTATION – SPRING 2005/FALL 2005

A full description of the GREAT Project with supporting documents (including approval form, blank rubric and checklist) is available on the cbcemd.edu website at the following URL: http://www.cbcemd.edu/loa/gen_ed_homepage.html. Sample Common Graded Assignments and rubrics are located on CCBC’s Innerloop, under the assessment community.

Currently, a Learning Outcomes Assessment Advisory Board member and faculty representative, Paulette Comet, facilitates the GREAT Project development with faculty leaders. The GREAT Project is an on-going faculty initiative. Faculty teams have designed a variety of CGAs and scoring rubrics for their disciplines.

The Mathematics courses team leaders for spring 2005 were:

Becky Benchik
Greg Fiore
Chris Mirbaha
Amy Hoffman
Bruce Walls
Carol Roush
Robert Jones
Andrew Beiderman
Steve Zimmer

The courses, as well as the team leaders, that were involved in the fall 2005 GREAT formal implementation were:

Biological and Physical Sciences		Team Leaders
ARSC103	Natural Science	Fred Hickok
ARSC104	Great Perspectives in Science	Fred Hickok
ASTM101	Astronomy	Dave Ludwikoski
ASTM102	Astronomy Laboratory	Paula Noeller
BIOL100	Exploring Biology	Encarni Trueba
BIOL104	Botany	Sonja Schmitz
BIOL106	Zoology	Jim Hershey
BIOL107	Human Biology	Dave Hargrove
BIOL108	Investigating Living World	Jen Kilbourne
BIOL109	Human Anatomy & Physiology	Mateja or Shrader
BIOL110	Biology 1: Molecular & Cell	Karen Dalton

CHEM100	Chemistry & Role in Society	George Farrant
CHEM102	Chemistry & Role in Society Lab	George Farrant
CHEM107	Fundamentals of Chemistry	Pauline Hamilton
CHEM108	Fundamentals of Chemistry Lab	Pauline Hamilton
CHEM121	General Chemistry I	Ron Drisko
CHEM122	General Chemistry I Lab	Crystal Yau
CHEM123	General Chemistry II	John Previdi
CHEM124	General Chemistry II Lab	John Previdi
ERSC101	Earth Science	Phyllis D'Ambrosia
PHYS100	General Physical Science	Lalitha Dorai
PHYS101	Fundamentals of Physics I	John Zelinsky
PHYS102	Fundamentals of Physics II	Bill Hosto
PHYS105	How Things Work	John Zelinsky
PHYS151	General Physics I	Lalitha Dorai
PHYS251	General Physics II	Bill Hosto

The spring 2006 team leaders were:

Barbara Crawford
Sandra Grady
Carr Kizzier

The course currently (spring, 2006) implementing GREAT assignments is listed below:

English Composition

ENGL 102 College Composition II

ENGL 101, College Composition I, was excused due to their involvement in a Learning Outcomes Assessment project. The faculty who teach this course will participate in spring 2007.

The courses slated for fall 2006 implementation are listed below:

Arts and Humanities

Course

SPCM 101	Fundamentals of Speech Communication
ARTS 104	Art Appreciation
ARTS 105	History of Art I
ARTS 106	History of Art II
DANC 135	Dance Appreciation
ENGL 201	British Literature I
ENGL 202	British Literature II
ENGL 203	American Literature I
ENGL 204	American Literature II
ENGL 208	African-American Literature

ENGL 224	Literature by Women
FLFR 101	Elementary French I
FLSP 101	Elementary Spanish I
INTR 101	American Sign Language I
INTR 102	American Sign Language II
MUSC 101	Music Fundamentals
MUSC 102	Music Appreciation
PHIL 101	Intro to Philosophy
PHIL 140	Ethics
THTR 101	Introduction to the Theatre

THE PROCESS

Scoring Rubrics

Each rubric is based on a 6-point scale, with 6 being the highest score possible and 1 being the lowest score possible. The scores are defined as follows:

- 1 **6** means that there is evidence beyond the expectations of the requirements for the assignment (“present, and, and”);
- 2 **5** indicates that the evidence is present, and the student has gone slightly beyond what is required (“present, and”);
- 3 **4** means that the evidence is “present” without any extra supporting material;
- 4 **3** means that there is something lacking from the requirement (“present, but”);
- 5 **2** indicates that there is some evidence, but that something important is lacking (“present, but, but”);
- 6 **1** means that there is “very little evidence that the skill has been achieved.”

COMMON GRADED ASSIGNMENTS

The Common Graded Assignments were assigned to students in multiple sections of the participating courses as a semester project. The six-point scoring rubric was given to students to optimize their likelihood of success by specifying what features characterized a paper/project at each of the six scoring levels. As mentioned in the introductory section of this report, the skills measured and identified on the rubric were: Content Knowledge; Written, Oral, and/or Signed Communication; Critical Thinking; Technology as a Learning Tool; Cultural Appreciation; and Independent Learning. These skills match the first six General Education Program goals. Faculty who were administering the CGAs were advised to collect two copies of the assignment from each student. One copy should be graded by faculty and returned to the student. The second copy should not have any comments or grades on it and will be used for scoring for the GREAT Project. Faculty were asked to write the student ID number on the second copy, so that demographics can be collected to provide more meaningful data.

SCORING THE COMMON GRADED ASSIGNMENTS

There were two scoring sessions, one on May 31, 2005 for spring 2005 and the other on January 25 – 26, 2006 for fall 2005. An e-mail message was sent to faculty and deans inviting those interested to attend a Scoring Day, to score a representation sample of the CGA's. Approximately 8 faculty scored the 194 sample papers from Mathematics and 10 faculty scored 269 sample assignments from Biological and Physical Sciences. Some of the Biological and Physical Sciences courses, due to a lack of volunteers to do the scoring, were not scored. Faculty were invited to score again during the next scoring day. An important component of the scoring days is the training of new scorers during the first hour of the first day and norming sessions, where faculty use the rubric and a sample of CGAs to come to consensus about the meaning of the "1" – "6" scores that the sampled papers should receive for each of the General Education goals.

During the actual scoring, each paper is read and scored by two scorers. Each of the six skill sets (as described above) is assigned a score on the rubric ranging from 6 to 1. A third person reviews the first two scores. If the two scores vary by one whole point or less, the two scores are averaged. For example, in the skill area of Critical Thinking, if one scorer assigns a score of 3 and the second scorer assigns a score of 2, the two scores are averaged for a final score of 2.5 for that skill. If the two scores vary by more than 1 point, a third reader scores the paper for only the skill area(s) where the variance occurs. The third reader's score is accepted as the final score for that criterion. The spring 2005 and fall 2005 data from this process is presented in the Results Section (below). A total of the six criteria scores for each paper was **not** significant as the project was analytically measuring student learning for each of the six General Education Program goals separately, not as a cumulative, holistic score.

RESULTS

At least 30 percent of the available CGAs were scored for each course sampled in spring, 2005 and fall, 2005. In cases where less than 20 CGAs were available, at least 50 percent of the papers were scored. The results cannot be generalized to other courses, disciplines, or even future semesters of the same course taught by the same teacher. The mean results of the eleven courses included in the spring 2005 implementation are reported in Table 1 and twelve courses included in the fall 2005 implementation are reported in Table 2.

TABLE 1
Mean Category Scores of Common Graded Assignments-Spring, 2005

Rubric Category	Math 111 N=39	Math 125 N=17	Math 128 N=3	Math 131 N=8	Math 132 N=10	Math 135 N=19	Math 161 N=40	Math 163 N=17	Math 165 N=19	Math 243 N=6	Math 252 N=16
Content	4.00	4.71	6.00	4.13	4.20	3.16	4.38	4.65	5.47	5.33	4.06
Communication	4.10	4.00	5.00	3.38	5.10	3.47	3.85	4.47	4.00	5.67	4.13
Critical Thinking	3.54	4.71	4.33	3.38	4.00	3.68	3.98	4.47	4.74	5.83	3.50
Technology	3.41	2.88	5.00	2.88	2.80	3.00	3.15	2.88	4.84	5.83	N/A
Cultural Appreciation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Independent Learning	N/A	N/A	N/A	N/A	N/A	3.16	3.63	4.24	N/A	5.67	3.75

TABLE 2
Mean Category Scores of Common Graded Assignments-Fall, 2005

Rubric Category	ASTM 102 N=17	BIOL 100 N=26	BIOL 104 N=3	BIOL 107 N=13	BIOL 108 N=15	BIOL 109 N=11	BIOL 110 N=100	CHEM 102 N=9	CHEM 107 N=32	CHEM 108 N=18	CHEM 122 N=15	PHYS 100 N=10
Content	4.1	3.6	2.7	3.8	3.8	4.1	3.2	4.4	3.5	3.5	3.2	2.2
Communication	4.1	3.7	1.8	4.2	3.7	4.6	2.9	4.4	3.4	2.8	2.7	2.2
Critical Thinking	4.1	3.7	2.3	4.0	3.9	3.9	2.7	4.1	3.5	3.2	2.9	2.2
Technology	4.1	3.7	3.8	3.7	4.1	3.2	2.7	N/A	3.8	3.3	3.4	2.2
Cultural Appreciation	4	N/A	N/A	N/A	N/A	1	N/A	N/A	4	N/A	N/A	2
Independent Learning	4.1	3.7	2.5	4.1	3.8	3.0	2.9	4.2	3.7	3.1	3.4	2.2

On the 6 point rubric scale, a score of “3” equates to the presence of the specific general education criteria with something lacking. Generally, the mean scores for each rubric category are in the 3 - 4 range. Cultural Appreciation mean scores in most of Mathematics and Science courses were not included in the CGA. Overall analysis revealed that the course had a significant effect for each rubric category ($p < .05$).

The full data summary for the Biological and Physical Sciences GREAT Project, prepared by Natasha Miller and the Office of Planning, Research, and Evaluation, follows this report.

CCBC’s faculty has learned from several administrations of CGA’s that students respond to a tightly written prompt that explicitly covers the General Education goals. This may be the primary reason for the increasing mean scores for the six General Education goals.

CONCLUSIONS

These data may indicate a need to increase awareness of faculty regarding how General Education courses are defined at the college in terms of the six criteria. The midrange to higher scores in Content may indicate a more traditional approach in courses where Content is conveyed with little expectation for higher-level Bloom's taxonomy use of content in application, critical thinking, analysis, and synthesis activities.

One advantage of the GREAT Project is the amount of flexibility that faculty have to design the CGAs and rubrics to meet the needs of the learners in their specific courses. One CGA may not be appropriate for all disciplines or courses. All General Education courses have the six goals in common, yet each course goes beyond the six core goals, and is distinctly unique. It is the differences between courses that may continue to limit the tabulation and interpretation of results across courses and disciplines.

There was significant improvement in a number of important areas in the fall, 2005 implementation, including:

1. Up-to-date website with many resources to assist faculty in improving areas of weaknesses.
2. The collection of demographic data in an effort to provide more meaningful, disaggregated data based on student characteristics.
3. Streamlined process to identify team leaders and early communication of responsibilities, expectations, and timelines.
4. More face to face meetings scheduled with Deans, chairpersons, and team leaders.
5. Much larger sample of CGAs to score (more sections requiring the CGA.)
6. Improved CGAs and rubrics, including greater specificity (further improvement from the pilot phases with many examples available for new faculty participants).
7. More consistent training of scorers (with veteran scorers aiding new scorers in the ease of the norming/scoring process).
8. Inclusion of many additional courses in the Project.

STAFF DEVELOPMENT

The primary means for staff development for the GREAT Project are the orientation meetings that team leaders have with the GREAT Coordinator and the Scoring sessions that are held each semester.

GREAT PROCESS RECOMMENDATIONS

1. Continue to work diligently to communicate to all faculty and staff about the GREAT project and solicit involvement in the assessment of the General Education Program goals. The two primary groups responsible for this initiative are the Learning Outcomes Assessment Advisory Board and the General Education Review Board.
2. Faculty must assign equal weighting of a particular Common Graded Assignment. Variations in the amount of time spent explaining the assignment, clarifying expectations and requirements, and the attitudes conveyed by instructors about the importance of the assignment toward the student's course grade may affect the results. Some consistency is essential lest we end up measuring faculty standards versus student abilities.
3. Pilot the CGAs and rubrics at least one semester prior to formal implementation.

PLANS FOR PROJECT IMPROVEMENT/AREAS OF CHALLENGE

The following are areas identified for Project improvement from the current implementation:

1. Encourage the infusion of classroom strategies for addressing the six general education criteria based on the collected GREAT data.
2. Include students in the assessment of General Education criteria using multiple methods.
3. Increase partnership with library staff (Information literacy experts), the writing center and faculty for the improvement of Critical Thinking and Communication infusion in courses.
4. Plan for implementation workshops for integrating General Education skills/criteria in courses and specific classroom techniques.
5. Expand CINS model (developed from the GREAT Project pilot phase) of using a WebCT site to share CGAs, rubrics, and sample syllabi with full-time and adjunct faculty to other disciplines.

SUMMARY

The CCBC GREAT Project strongly continues with a large increase in faculty (both full-time and part-time) participation. Communication about the project and its goals has improved, with faculty recognizing its utility in the improvement of what the institution values (six criteria) within General Education. Collected data and strategies researched are being used by faculty teams to work toward adjusting assignments and teaching strategies in order to provide more opportunities for students to exercise and refine their General Education skills.

GENERAL EDUCATION OUTCOMES ASSESSMENT
DATA SUMMARY

PREPARED BY:
THE OFFICE OF PLANNING, RESEARCH AND EVALUATION

JUNE 2006

The General Education Outcomes Assessment (GREAT) project was conducted during the Fall 2005 semester on all three of CCBC main campuses. The assessment data was combined with other student information such as grades and demographics, to provide a comprehensive representation of the students. This summary will focus on an analysis of the scores on the six categories as set forth in the common graded assignments. If you have any questions, please contact Natasha Miller, 410-455-4745 or nmiller2@ccbcmd.edu.

Summary of students participating in the GREAT Projects:

- The following courses took part in this project: Astronomy 102, Biology 100, 104, 107, 108, 109 110, Chemistry 102, 107, 108, 122 and Physics 100
- A total of 303 students took part in the project but only 269 were matched to student demographic information
- The majority of the students were female (184), 82 males and three students whose gender could not be identified
- Of the 269 students 85% successfully completed the course with a grade of A thru D (Table 1)
- Across most of these students there was a relatively high success rate with the exception of physics with a 60% success rate
- Of the 269 students taking part in this project 57% were Caucasian, 26% African-American/Black, 8% Asian and 8% were representatives of other ethnic groups
- The mean GPA across all courses taking part in this project was 2.86 and completed an average of 33.37 credit hours
- Students in Astronomy 102 had the highest GPA of 3.29 and students in Physics the lowest GPA of 2.21 (Table 2)
- Across all the courses the ages ranged from 16 to 56 years old with an average of 25 years old

TABLE 1:
Grade distributions by percent and number in all courses participating the Fall 2005
 GREAT project

Grades	A-D	AU	F	W
ASTM 102	94% (16)	NA	6% (1)	NA
BIOL 100	92% (24)	NA	8% (2)	NA
BIOL 104	100% (3)	NA	NA	NA
BIOL 107	100% (13)	NA	NA	NA
BIOL 108	73% (11)	NA	27% (4)	NA
BIOL 109	72% (8)	9% (1)	18% (2)	NA
BIOL 110	80% (80)	4% (4)	12% (12)	4% (4)
CHEM 102	100% (9)	NA	NA	NA
CHEM 107	84% (27)	NA	13% (4)	3% (1)
CHEM 108	100% (18)	NA	NA	NA
CHEM 122	93% (14)	NA	NA	7% (1)
PHYS 100	60% (6)	10% (1)	30% (3)	NA
Overall	85% (229)	2% (6)	10% (28)	2% (6)

NA=no grade in that category

TABLE 2:
Mean GPA and number of hours passed by Course

COURSE	Number of Students	Mean GPA	Mean Hours Passed
ASTM 102	17	3.29	38.88
BIOL 100	26	2.80	35.73
BIOL 104	3	2.99	32.67
BIOL 107	13	2.93	38.23
BIOL 108	15	2.82	37.27
BIOL 109	11	2.67	26.91
BIOL 110	100	2.72	24.98
CHEM 102	9	3.03	39.00
CHEM 107	32	2.96	40.78
CHEM 108	18	3.22	47.17
CHEM 122	15	3.16	38.53
PHYS 100	10	2.21	35.60
Overall	269	2.86	33.37

Summary of results of the Common Graded Assignments

- Across all of the subjects the mean score ranged from 3.1 to 4.1 for most of the categories with the exception of culture (Table 3)
- The analysis revealed that the course (Biology, Astronomy, Chemistry and Physics) had a significant effect on the score received on the different categories
- Examination of the mean scores in the various categories by subject area revealed that in Biology and Chemistry the scores ranged from 3.1 to 3.6 (Table 3)
- This result supports the idea that the courses are fundamentally different and the course should have an effect on the score
- Culture is a category that is not taught in many of the courses area so the low mean was not unexpected
- Physics 100 consistently received the lowest scores with a mean of 2.2 across most of the categories
- Chemistry 122 received relatively low scores in communication and critical thinking but had high means in content, technology and independent learning (Table 4)
- The scores from Biology 104 seem to suggest issues in the area of communication, critical thinking and independent learning
- Biology 110 scores for communication, critical thinking, independent learning and technology are in the 2.7 to 2.9 range which suggest they are on the border of falling outside of the 3.0 range
- The majority of the courses had means in the 3.0 or higher range with Astronomy displaying a 4.1 mean in all category areas
- There was only one chemistry and physics course therefore their results are they same as those depicted in Table 3
- The analysis of the effect of number of credit hours completed on category scores failed to reveal a significant effect
- An analysis by GPA on the category scores also failed to reveal a significant effect
- This suggest that the number of credit hours completed and the GPA of the students did not significantly affect the mean scores
- However, an examination of the means revealed that as GPA increases the scores in all of the categories increased (Table 6)
- Examination of the number of credit hours did not find a discernible pattern; there was no indication that as number of hours completed mean scores increased (Table 5)
- To further examine this effect by course Table 7 displays the effect more clearly

TABLE 3:
Mean scores on the six categories by subject

Subject	Content	Communication	Critical Thinking	Technology	Culture	Independent Learning
ASTM	4.1	4.1	4.1	4.1	4.1	4.1
BIOL	3.4	3.3	3.1	3.1	.06	3.2
CHEM	3.6	3.2	3.4	3.1	1.7	3.6
PHYS	2.2	2.2	2.2	2.2	2.2	2.2

TABLE 4:
Mean scores on the six categories by course

Course	Content	Communication	Critical Thinking	Technology	Culture	Independent Learning
ASTM 102	4.1	4.1	4.1	4.1	4.1	4.1
BIOL 100	3.6	3.7	3.7	3.7	0	3.7
BIOL 104	2.7	1.8	2.3	3.8	0	2.5
BIOL 107	3.8	4.2	4.0	3.7	0.4	4.1
BIOL 108	3.8	3.7	3.9	4.1	0	3.8
BIOL 109	4.1	4.6	3.9	3.2	0.6	3.0
BIOL 110	3.2	2.9	2.7	2.7	0	2.9
CHEM 102	4.4	4.4	4.1	0.0	0	4.2
CHEM 107	3.5	3.4	3.5	3.8	3.9	3.7
CHEM 108	3.5	2.8	3.2	3.3	0	3.1
CHEM 122	3.2	2.7	2.9	3.4	0	3.4
PHYS 100	2.2	2.2	2.2	2.2	2.2	2.2
Overall	3.4	3.28	3.23	3.15	.84	3.31

TABLE 5:
Mean scores on the rubric categories by number of hours completed

Number of hours passed	Number of students	Content	Communication	Critical Thinking	Technology	Culture	Independent Learning
0 – 20	78	3.50	3.27	3.19	3.00	0.36	3.25
21 – 41	101	3.45	3.23	3.21	3.24	0.94	3.22
42 – 62	75	3.45	3.42	3.36	3.23	1.30	3.55
63 – 83	13	2.88	2.88	2.96	3.00	0.50	3.04
84 – 105	2	2.50	3.00	2.50	2.75	0.00	2.25
Overall	269	3.43	3.28	3.23	3.15	0.84	3.30

TABLE 6:
Mean scores on the rubric categories by overall GPA

Overall GPA	Number of students	Content	Communication	Critical Thinking	Technology	Culture	Independent Learning
0 – 1.00	5	2.70	3.00	3.00	2.60	1.10	2.80
1.01 - 2.00	32	3.00	3.20	2.91	2.83	0.19	2.88
2.01 - 2.50	37	3.04	2.86	2.76	2.73	0.66	2.82
2.51 - 3.00	82	3.34	3.09	3.09	3.07	0.99	3.13
3.01 - 3.50	51	3.53	3.28	3.26	3.28	0.40	3.44
3.51 - 4.00	62	3.98	3.81	3.85	3.61	1.43	3.97

TABLE 7:
Mean scores on the rubric categories by number of hours passed and by course

Overall number of hours passed	Rubric Category	ASTM 102	BIOL 100	BIOL 104	BIOL 107	BIOL 108	BIOL 109	BIOL 110	CHEM 102	CHEM 107	CHEM 108	CHEM 122	PHYS 100
0-20	Content	4.33	4.31	3.00	4.00	3.83	3.33	3.23	5.00	4.33	4.25	3.00	1.00
	Communication	4.33	4.38	1.50	4.50	3.33	4.00	2.96	4.50	3.83	3.25	2.50	1.00
	Critical Thinking	4.33	4.44	2.00	4.25	3.50	4.00	2.76	4.50	4.00	4.00	2.25	1.00
	Technology	4.33	4.44	3.50	4.25	3.67	2.67	2.73	0.00	4.33	3.75	3.25	1.00
	Culture	4.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.33	0.00	0.00	1.00
21-41	Independent	4.33	4.31	2.50	4.25	3.00	3.67	2.92	4.00	4.17	3.50	3.50	1.00
	Content	4.00	3.13	3.50	4.17	3.90	4.08	3.10	5.00	3.68	3.40	3.25	3.20
	Communication	4.00	3.25	2.00	4.42	3.80	4.58	2.73	4.50	3.43	2.80	2.38	3.20
	Critical Thinking	4.00	3.06	3.00	4.25	4.00	3.42	2.68	4.50	3.71	3.20	2.88	3.20
	Technology	4.00	3.19	4.50	4.17	4.30	3.33	2.64	0.00	4.00	3.60	2.88	3.20
42-62	Culture	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.89	0.00	0.00	3.20
	Independent	4.00	3.06	2.50	4.33	4.30	2.33	2.79	5.00	3.71	3.30	2.88	3.20
	Content	4.00	3.50	1.50	3.67	3.67	5.25	3.19	4.13	3.42	3.38	3.06	1.50
	Communication	4.00	3.79	2.00	4.00	3.67	5.50	3.15	4.25	3.35	2.88	2.94	1.50
	Critical Thinking	4.00	3.71	2.00	4.00	4.08	5.00	2.81	3.88	3.27	3.06	2.94	1.50
63-83	Technology	4.00	3.71	3.50	2.50	4.17	3.75	3.19	0.00	3.38	3.06	3.44	1.50
	Culture	4.00	0.00	0.00	1.50	0.00	3.00	0.00	0.00	4.00	0.00	0.00	1.50
	Independent	4.00	3.86	2.50	4.17	3.75	4.25	3.08	4.25	3.77	3.06	3.50	1.50
	Content	.	3.25	.	3.00	3.50	.	1.50	3.50	2.25	3.50	4.00	1.00
	Communication	.	3.50	.	3.75	4.00	.	2.00	4.50	2.50	2.00	2.50	1.00
84-105	Critical Thinking	.	3.50	.	3.25	3.50	.	1.50	3.50	3.00	2.75	4.00	1.00
	Technology	.	3.25	.	3.75	4.00	.	1.50	0.00	3.75	3.00	5.00	1.00
	Culture	.	0.00	.	0.00	0.00	.	0.00	0.00	2.75	0.00	0.00	1.00
	Independent	.	3.50	.	3.25	4.00	.	2.00	4.00	2.25	2.75	5.00	1.00
	Content	.	2.00	.	.	.	.	.	.	.	.	3.00	.
84-105	Communication	.	2.50	.	.	.	.	.	.	.	3.50	.	.
	Critical Thinking	.	2.00	.	.	.	.	.	.	.	3.00	.	.
	Technology	.	2.00	.	.	.	.	.	.	.	3.50	.	.
	Culture	.	0.00	.	.	.	.	.	.	.	0.00	.	.
	Independent	.	2.00	.	.	.	.	.	.	.	2.50	.	.

PROGRAM LEVEL LEARNING OUTCOMES ASSESSMENT

PREPARED BY:
ROSE MINCE

MAY 2006

OVERVIEW

Program outcomes assessment became a mandatory component of the Program Review process in 2005. Prior to that time outcomes assessment projects were encouraged and voluntary. Program Coordinators of the following programs have conducted voluntary program-level assessment projects: Recreation and Leisure Therapy, Health and Fitness Studies, Occupational Therapy Assistant, and Floral Design. The following eight programs/coordinators participated in the Program Review process in 2005-06, and all were required to complete an assessment project:

Engineering Transfer	John Walker
Computer Science Transfer	Jack McLaughlin/Penny Fanzone
Interpreter Preparation	Sandra Brown
Construction Management	Greg Case
Labor Studies	Bill Barry
Hospitality Management	Scott Vratarich
Environmental Science Technology	Chris Fox
Paralegal Studies	Patricia Ferraris O'Neill

Each Program Coordinator began the assessment project by identifying approximately three to five measurable outcomes that students should achieve upon completion of the program. The Program Coordinator then decided if a Program Outcomes Assessment Project (POAP), designed to measure those outcomes, or a Core Competencies Assessment Project, designed to measure the four CCBC Core Competencies communication, problem-solving, global perspective and social responsibility, and independent learning and personal management, would be more valuable. Patricia Ferraris O'Neill, Program Coordinator of the Paralegal Studies program, completed a Core Competencies Assessment Project for her program in 2004-05 and thus was not required to do another project in 2005-06. Of the remaining seven programs that participated in Program Review during 2005-06, two selected the Core Competencies option, Bill Barry-Labor Studies, and Greg Case-Construction Management.

Paralegal Studies

The goal of this learning outcomes assessment project was to study the correlation between the specific course objectives presented in the Common Course Outlines and the actual material and testing tools that were being used in each course. The Program Coordinator also looked at how these objectives and the substance of the courses correlated to CCBC's Core Competencies. The ultimate goal of this project was to identify weak areas in each course and put a plan together to enhance the experience of students and to strengthen the Paralegal Studies program. The courses that were

examined were: PLAW 101 Introduction to Law, PLAW 103 Legal Research, PLAW 104 Law Office Practice and Legal Ethics, PLAW 108 Real Estate, PLAW 183 Internship I and II, PLAW 202 Criminal Law, PLAW 203 Estate Administration, PLAW 207 Torts, PLAW 217 Business Law, and PLAW 230 Advanced Legal Research.

The Program Coordinator presented the following conclusions from the project to the Learning Outcomes Assessment Advisory Board in April 2005:

- teachers vary widely in what they include in their course syllabi and the emphasis they place on course objectives and the core competencies;
- all four core competencies need to be emphasized to a greater degree throughout the program;
- in particular, there needs to be a greater focus on international issues, especially in courses that specifically deal with global perspectives and social responsibility.

The Program Coordinator is currently addressing these issues by meeting with the PLAW faculty to review and revise all of the Common Course Outlines. She is also collating the instruments that faculty use to assess the course objectives and the core competencies and planning faculty development workshops to ensure coordination between the objectives, the competencies, and the assessment techniques used to measure student learning in each.

Labor Studies

Bill Barry submitted his completed Core Competencies assessment project notebook in May 2006. From this project, Bill learned that all four competencies are critical to student success in each of the four Labor Studies courses that he examined (LBST 113, 109, 134, 135) and that communication and global perspective and social responsibility are the two most important competencies for Labor Studies students. Bill compiled a collection of the assessment instruments that he uses to measure student learning in each of the four areas. His final responsibility, to share what he learned from his project with the members of the Learning Outcomes Assessment Advisory Board, will be completed in September 2006.

Ongoing Projects and Plans

Greg Case has completed the first draft of the RFP for the Core Competencies project for the Construction Management program. He will collect data in fall 2006. Chris Fox and the other full-time faculty members who teach in the Environmental Science Technology program requested a two-year suspension for that program to consider possible ways to revise the program to meet changing environmental needs, to increase enrollment, and to better serve students' needs, so that Program Coordinator was not required to conduct an assessment project.

Three Program Coordinators selected the POAP option. The three programs conducting this type of assessment are Engineering, Computer Science, and Interpreter Preparation. Since it takes multiple semesters for these projects to be completed, the full assessment

project plan, along with data collected to date, will be included in the Program Review report, with remaining data and information to be submitted as an addendum when the assessment project is completed. All three Program Coordinators completed their RFP, signed by their academic division dean, as part of their Program Review report. Scott Vratarich, Program Coordinator for the Hospitality Management program, will conduct that program's assessment project in 2006-07. All POAPs must be completed within two and one-half years from the time they are started.

Engineering

The Engineering transfer program is designed to help students acquire the skills they will need to successfully transfer into an Engineering program at a four-year college or university. In ENSC 101, Introduction to Engineering Design, students are assigned a real-world situation where they must develop valid engineering solutions. Students interact with a client external to the class and complete a project such as developing adaptive equipment for people with physical limitations. Students work in groups to develop solutions, analyze and test equipment, and submit documentation within time and budget constraints. Projects are critiqued by engineering professionals based on a detailed rubric. Projects must also satisfy clients. Data collection was conducted in spring 2006. The Program Coordinator, John Walker, plans to complete the project by the end of the fall 2006 semester.

Computer Science

The Computer Science transfer program has two options, Computer Science and Information Management, with very different foundations. The Computer Science option is founded in mathematics and is modeled after the first two years of a traditional bachelor's degree in computer science, using Towson University and the University of Maryland, Baltimore County as the two primary models. The Information Management option has a foundation in accounting, economics, and management and is modeled after the first two years of a traditional bachelor's degree program in Information Management or Information System Management, using three schools as the bases: Towson University, The University of Maryland, Baltimore County, and the University of Baltimore. Since this program is designed for transfer, the Program Coordinators Jack McLaughlin and Penny Fanzone, decided that a comparison of student success once students transfer to their chosen four-year college or university was the best means to assess the preparation that they received at CCBC. Data will be collected to compare students' overall grade point averages (GPA) in each of the two options and determine how well CCBC students fare as compared to students who begin at the aforementioned transfer schools (native students.) The Transfer Student System is currently being used by all colleges in Maryland to collect and share data, and a model for the Transfer Exchange System has been developed by University of Maryland, College Park. Comparison data should be available in the near future. An additional source of data, the National Student Clearinghouse, is currently being used by approximately 97% of colleges and universities nationwide. Data collection is scheduled for summer 2006.

Interpreter Preparation

Sandy Brown, Program Coordinator, and Carol Tipton, faculty member, in the Interpreter Preparation Program, decided to build their assessment project around the fieldwork experience that all students must complete prior to graduation. The INTR 241 Practicum is the culminating course in the program, where students must complete 90 hours of interpreting fieldwork. Interpreter mentors will evaluate students' on-the-job performance using a detailed rubric to provide individualized feedback based on 26 program skills in the areas of professionalism, English-to-Sign, and Sign-to-English. The external graders who serve as the approved interpreter mentors will complete a feedback evaluation form after working a minimum of 10 hours with an INTR student during their practicum. Each student in the practicum has two evaluations completed by a mentor, plus an evaluation completed by his/her instructor. Data collection began in spring 2006 and will continue through summer and fall 2006.

Progress toward Project Completion

As with all of the other CCBC assessment projects, program-level projects follow a five-stage process. The table below identifies how many programs are currently in each stage:

- Stage 1 Construction Management and Hospitality Management
- Stage 2 Engineering, Computer Science, and Interpreter Preparation;
- Stage 5 Paralegal Studies and Labor Studies.

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
2	3			2

Progress toward completion of each project will be monitored and reported upon annually. Data collection has begun for the Engineering Transfer and Interpreter Preparation programs, so they will soon be in Stage 3, where the Program Coordinator reviews the data and identifies curricular and/or administrative changes that will enhance student learning and mastery of the program outcomes.

2006-07 Projects

The Assistant to the Vice Chancellor for Learning and Student Development has met with the Program Coordinators who will participate in the Program Review Process in 2006-07 to orient them to the Program Review process and to help them determine which type of assessment project will be most valuable for their students and program. These projects will be reported upon in the 2006-2007 Learning Outcomes Assessment Annual Report.

LEARNING OUTCOMES ASSESSMENT IN STUDENT SERVICES AND ENROLLMENT MANAGEMENT

SUBMITTED BY:
DR. CINDY PETERKA

MAY 2006

PREPARED WITH ASSISTANCE FROM THE LOA ADMINISTRATORS INVOLVED IN THE STUDENT SERVICES AND ENROLLMENT MANAGEMENT PROJECT.

OVERVIEW

This year, the Community College of Baltimore County implemented its first Learning Outcomes Assessment in Student Services Plan. Ten high impact projects were implemented in the functional areas of Academic Advising, Admissions, Records and Registration, Athletics, Financial Aid, Student Life, Testing Centers, and Tutoring. Financial Aid and the Testing Centers implemented two projects. All projects were designed to contribute to the core competency of developing students as independent learners. It is hoped that the efforts of Student Services and Enrollment Management staff in developing students as independent learners outside of the classroom will assist faculty in their efforts to develop independent learners in the classroom.

The goal of the plan is to shift the focus of assessment in Student Services from student satisfaction of services to student learning of core competencies; to assist staff to learn how to design, implement, and analyze learning outcomes projects; and to improve services and programs based on learning outcomes analysis.

The CCBC Learning Outcomes Assessment in Student Services Plan is connected to a statewide project of the Maryland Vice Presidents and Deans of Student Services Affinity Group that intends to benchmark learning outcomes of similar projects throughout the state. Through this initiative, best practices will be identified for institutions to model.

Learning Outcomes in Student Services project of the Maryland State Vice Presidents and Deans of Students received a national exemplary practice award from the National Council on Student Development, an affiliate of the American Association of Community Colleges. CCBC was instrumental in leading the development of the statewide project.

INSTITUTIONAL OUTCOME ASSESSMENT

PREPARED BY:
DAN MCCONOCHIE

MAY 2006

Evaluation of institutional effectiveness at CCBC includes a systematic approach to providing information for evaluating the College's progress in meeting its strategic goals and for evaluating improvement in key processes at the College. Reports and indicators are provided throughout the year to support decision-making at the management and policy levels, to promote continuous improvement of CCBC's programs and services, and to monitor progress toward benchmarks that are set at the college and unit levels. While many of these studies and indicators measure student success such as trends in degree attainment, transfer to four year campuses, retention, and successful course completion; other indicators focus on evaluation of the processes that support that student success. Also included in these measures of institutional effectiveness are indicators of how the College is moving toward its goals in enrollment, organizational excellence, embracing cultural diversity, improving internal communications, creating a learning college, and also how well it is meeting its obligations to contribute to its community and promote the economic, social and workforce development of the region.

Included in CCBC's Effectiveness Indicators (these are located at [CCBC Accountability Indicators](#)) are the Maryland Higher Education Commission's Performance Accountability Indicators. During FY2006 the previous performance indicators were evaluated against the benchmarks set in 2000 ([Performance Accountability Report-FY2005](#).)

During FY2006 a new set of statewide indicators was developed. Baseline data for these new indicators are currently being prepared so that CCBC benchmarks for 2010 can be established. Several new data systems have needed to be established to collect the information needed for these new indicators but there is anticipation that many of the new indicators will be better aligned with CCBC's own strategic goals and better measure student success and community college effectiveness in promoting that success.

The College's measurement of effectiveness is documented in its Institutional Effectiveness Indicator System and in numerous research briefs that track trends and provide more in-depth analyze of indicators. These measurement efforts are based on stakeholder evaluations, progress toward best practices, and progress toward agreed upon targets. Various information systems have been built to assist in the collection, retrieval, and reporting of these measures including annual surveys of faculty, students, and staff. In addition, admission, placement, enrollment, retention and degree data systems provide trends that are monitored for change toward targets in these areas. A third source for these measurements has been the use of nationally normed systems to assess CCBC performance in relation to other community colleges in Maryland and in the country.

Summary descriptions of major components of this array of evaluation measures are provided below with particular emphasis on measures that CCBC attempts to disaggregate and drive down to the program, course, and unit level. Examples of these “drill down” indicators are:

- CCBC’s Program Data System Report. These data reports support program evaluation of enrollment trends, monitoring of productivity, and trends in student characteristics, student retention and degree completion for each academic program.
- CCBC’s Enrollment Reporting System provides trends in enrollment, trends in enrollment by student categories such as age, gender, and race; enrollment trends by course category; and trend reports on enrollment by zip code areas, the high school of students, and remediation rates. These reports are provided for each term with additional research briefs that focus more closely on special categories of students such as high school students who are concurrently enrolled at CCBC.
- Course Success Trends, Student Retention Trends, and Degree Completion Trends are summarized at the college level but are also provided at the campus, program, and course level to identify best practices at CCBC and also to monitor areas where student success rates may need further support. Examples of FY2006 studies that have drilled such indicators down to categories below the institutional level have been analysis of course success trends for online courses and for developmental education courses.
- Student and Staff Survey Evaluations are summarized into Effectiveness Indicators at the college level and also the responses are used in the evaluation of particular services that are provided within CCBC. During FY2006 these surveys have included Spring 2006 Surveys of Full Time Faculty, Adjunct Faculty, Non-Teaching Employees, the Fall 2005 Student Satisfaction Survey, the Spring 2006 Community College Survey of Student Engagement (CCSSE), the Spring 2006 Community College Faculty Survey of Student Engagement (CCFSE), and a number of topical surveys.

Included below as an example of surveys conducted during the year is a summary report regarding the Fall 2005 Student Satisfaction Survey.



CCBC

The Community College of Baltimore County
Planning, Research and Evaluation

FALL 2005

STUDENT SATISFACTION REPORT

PREPARED BY:

NORA C. BYE

OFFICE OF PLANNING, RESEARCH, AND EVALUATION

MARCH 2006

BACKGROUND

The Planning, Research, and Evaluation Office conducts a Student Satisfaction Survey in the fall of each year. The purpose of this survey is to assess the perception of the college by students and to gather feedback on particular issues. The survey asks the respondents why they are attending CCBC, their level of education and that of their parents, and employment status. The survey also addresses the students' level of satisfaction with college services, college publications and instructional activity. Results of the survey are used in the Effectiveness Indicators and in the evaluations of functional areas. See Appendix A for survey.

SURVEY METHODOLOGY AND ADMINISTRATION

During the fall 2005 term, 19,622 students were enrolled in 3,797 sections at CCBC.

Three hundred twenty four (324) sections were randomly selected for participation in the survey. There were 6,753 students enrolled in the selected sample of sections. 3,151 (47%) of the students in the selected sections responded. Weekend courses and courses on smaller extension sites other than Owings Mills were excluded from the sample. The characteristics of the survey respondents closely matched the characteristics of students enrolled at CCBC during fall 2005. See Appendix B and C for more details.

CURRENT REPORT

This report provides the results of the fall 2005 Student Satisfaction Survey. The section on Characteristic of Respondents provides responses regarding household characteristics and current college experiences.

The section on Student Satisfaction reports the respondent level of satisfaction with college services, publications, instructional quality, and the CCBC environment. Responses regarding the attitudes of the faculty and staff toward students are presented in regards to age, gender, and ethnicity. See Appendix D for campus level results.

The final section of the report compares the results of fall 2005 to fall 2004 Student Satisfaction Survey. This comparison examines changes in satisfaction with college services, instructional quality, and faculty and staff attitudes.

EMPLOYMENT STATUS

- Overall, 78% of those respondents were employed on a full-time or part-time basis.

Table 1

Employment Status of Survey Respondents

Employment Status	Respondents	
Full-Time	1,269	40%
Part-Time	1,211	38%
Retired	35	1%
Not Employed	546	17%
Non response	90	3%

EMPLOYMENT LOCATION

- Of the employed respondents, the largest portion (63%) works in Baltimore County or Baltimore City.

Table 2

Employment Location of Survey Respondents

Employment Location	Respondents	
Baltimore County	1,568	50%
Baltimore City	409	13%
Anne Arundel County	92	3%
Carroll County	32	1%
Harford County	78	3%
Howard County	162	5%
Other MD County	73	2%
Outside of Maryland	27	1%
Non response/Not Working	710	23%

STUDENT LEVEL AND COLLEGE CREDITS

- The majority of the respondents were continuing students who had been enrolled in the previous spring term. The next largest group was: students who had never attended college, followed by students who previously attended CCBC but not in spring 2005.

Table 3

College Level and Number of Credit Hours of Survey Respondents

Student Level	Total	Percent of All Students
New College Student	587	19%
New Student at CCBC (Attended another college)	360	12%
A continuing student (attended CCBC Spring 2005)	1,543	50%
A returning student (previously attended CCBC but not in Spring 2005)	463	15%
Non response	103	4%
Total	3,056	100%

Level of Education of Self and Parents

- Only 21% of the respondents reported their highest educational attainment to be high school. 61% already had some college and **14% report they already had a college degree.**
- Students reported that 50% of their mothers and 51% of their fathers have not completed an AA degree.
- 49% of the students reported that their mother's highest degree was an AA or above while 39% reported their father's highest degree was an AA or above.

Table 4
Educational Level of Self and Parents

Level of Education	Mother		Father		Self	
Less Than High School	128	9%	278	11%	48	2%
High School	426	30%	791	31%	648	21%
Some College	159	11%	237	9%	1,877	61%
AA Degree	243	17%	226	9%	180	6%
Bachelor's Degree	296	21%	421	17%	182	6%
Master's or Above	158	11%	337	13%	75	2%
Don't Know	31	1%	251	10%	48	2%
Total	1,441	100%	2,541	100%	3,058	100%

STUDENT INTENT

- The largest percent of survey respondents (38%) indicated that their primary purpose for attending CCBC was to gain credits to transfer to a four-year college or university. An additional 24% reported they were seeking a Transfer Degree.
- Twenty three percent of survey respondents are attending CCBC for the purpose of obtaining an Associate's degree or certificate in a career program or to take courses in preparation for a job.

Table 5
Purpose for Attending CCBC

Student Intent	Respondents	
To obtain an Associate's Transfer Degree	766	24%
Take courses to transfer to a Four-year College/Universities	1,205	38%
To obtain a career related Associate's degree or Certificate	584	19%
Take courses in a career/technical area	65	2%
Take job related/required courses	52	2%
For self-improvement	128	4%
Non response	351	11%

CURRENT CLASS SCHEDULE

Table 6
Class Schedule of Survey Respondents

Class Schedule	Respondents	
Day Classes Only (Before 5 p.m.)	1,720	55%
Evening Classes Only (After 5 p.m.)	633	20%
Both Day and Evening Classes	677	22%
Non response	121	4%

EFFECT OF COURSE CANCELLATIONS

- 17% of the respondents answered yes to the question: “Have course cancellations impacted the course schedule you wanted to take in fall 2005?”

Table 7
Impacted by Course Cancellations?

Course Cancellations	Respondents	
Yes	520	17%
No	2,472	79%
Non response	159	5%

ISSUES THAT WILL IMPACT ON EDUCATION ATTAINMENT

- Survey respondents were asked to report how transportation, family, job, household finances, tuition costs, language barriers, and computer access would impact their education at CCBC.

Table 8
Issues that will impact on Educational Attainment

	Major Problem	Moderate Problem	Minor Problem	Not a Problem	Non Response
Transportation	262 8%	315 10%	366 12%	1,872 59%	336 11%
Family	151 5%	294 9%	531 17%	1,839 58%	336 11%
Job	247 8%	492 16%	778 25%	1,292 41%	342 11%
Household Finances	351 11%	460 15%	604 19%	1,394 44%	342 11%
Tuition Costs	478 15%	575 18%	586 19%	1,240 39%	272 9%
Language Barriers	61 2%	96 3%	193 6%	2,568 82%	233 7%
Computer Access	74 2%	162 5%	318 10%	2,374 75%	223 7%

Student Satisfaction

COLLEGE SERVICES AND PUBLICATIONS

- Of those who indicated that they used the services, over 70% of respondents were satisfied with CCBC's catalog, application form, fall printed schedule, admissions office, in person registration, bookstore and web site. Among those services that had 10% or more of students expressing dissatisfaction (more than 300 respondents) were: Placement and Testing, Academic Advising, Payment Procedures, Facilities, Food Services, availability of day and evening courses, and Parking.
- Of additional interests are the services and publications where students reported they did not use that item.

Table 9

Student Satisfaction with College Services and Publications

	Satisfied/Very Satisfied	Neutral	Dissatisfied/Very Dissatisfied	Not Used	Non Response	Satisfaction Of Those Using Service
Web Site	2,019 64%	459 15%	285 9%	261 8%	127 4%	73%
Catalog	2,181 69%	454 14%	153 5%	236 8%	127 4%	78%
Application Form	2,230 71%	516 16%	139 4%	145 5%	121 4%	77%
Admissions Office	2,166 69%	527 17%	212 7%	132 4%	114 4%	75%
Placement and Testing	1,682 53%	644 20%	308 10%	378 12%	139 4%	64%
Academic Advising	1,792 57%	532 17%	374 12%	304 10%	149 5%	66%
Registration: In Person	2,131 68%	483 15%	280 9%	132 4%	125 4%	74%
Registration: Telephone	899 29%	613 20%	263 8%	1,233 39%	143 5%	51%
Financial Aid	1,404 45%	563 18%	292 9%	742 24%	150 5%	69%
Cashier's Office	1,753 56%	592 19%	213 7%	442 14%	151 5%	62%
Tuition/Fee Payment Procedures	1,855 59%	646 21%	314 10%	170 5%	166 5%	66%
Orientation	1,239 39%	693 22%	264 8%	799 25%	156 5%	56%
Campus Parking	904 29%	578 18%	1,388 44%	156 5%	125 4%	31%
Condition of facilities	1,923 61%	693 22%	329 10%	40 1%	166 5%	65%
Bookstore	2,166 69%	566 18%	196 6%	68 2%	155 5%	74%
Food Services/Cafeteria	1,325 42%	639 20%	306 10%	733 23%	148 5%	58%

Table 9 (Continued).
Student Satisfaction with College Services and Publications

	Satisfied/Very Satisfied	Neutral	Dissatisfied/Very Dissatisfied	Not Used	Non Response	Satisfaction Of Those Using Service
Fall Printed Credit Schedule	2,202 70%	503 16%	161 5%	151 5%	134 4%	77%
Fall Online Credit Schedule	1,470 47%	561 18%	217 7%	769 24%	134 4%	65%
Availability of courses you want during the day	1,831 58%	524 17%	356 11%	366 12%	74 2%	68%
Availability of courses you want during the evening	1,246 40%	701 22%	319 10%	798 25%	87 3%	55%

INSTRUCTIONAL QUALITY

- The majority of survey respondents expressed satisfaction with the overall quality of instruction at CCBC.

Table 10
Student Satisfaction with Instructional Quality

	Satisfied/Very Satisfied	Neutral	Dissatisfied /Very Dissatisfied	Not Used	Non Response	Satisfaction Of Those Using Service
Quality of instruction in my major field	2,026 64%	570 18%	207 7%	240 8%	108 3%	65%
Quality of instruction in my developmental courses	1,983 63%	612 19%	188 6%	239 8%	129 4%	71%
Quality of labs in my courses	1,501 48%	618 20%	207 7%	699 22%	126 4%	65%
Quality of Library Resources	1,876 60%	528 17%	169 5%	469 15%	109 4%	73%
Overall quality of instruction	2,398 76%	454 14%	153 5%	28 1%	118 4%	80%
Overall quality of your experience at CCBC	2,328 74%	506 16%	178 6%	30 1%	109 4%	77%

ATTITUDE OF FACULTY TOWARDS STUDENTS

- Seventy six percent of these students were satisfied or very satisfied with the attitudes of faculty toward students. 14% marked a neutral response (neither satisfied nor dissatisfied) and only a very small percent, 6%, reported they were dissatisfied/very dissatisfied with faculty attitudes.
- There was no difference between male and female respondents in the satisfaction with faculty attitudes towards students and there were no differences among ethnic groups.

Table 11

Level of Satisfaction with Attitude of Faculty Towards Students in Class

	Satisfied/Very Satisfied	Neutral	Dissatisfied/Very Dissatisfied	Not Used	Satisfaction Of Those Using Service
Total Respondents	2,381 76%	439 14%	175 6%	156 4%	79%
Ethnicity					
African American	629 77%	137 17%	39 5%	10 1%	78%
Asian	110 75%	27 19%	7 5%	2 1%	76%
Hispanic	376 79%	69 14%	28 6%	5 1%	79%
Native American	14 82%	2 12%	1 6%	0 0%	82%
Other	96 71%	25 19%	10 7%	4 3%	73%
White	1,049 81%	158 12%	82 6%	13 1%	81%
Gender					
Male	995 78%	179 15%	75 6%	19 1%	79%
Female	1,358 78%	259 15%	100 6%	15 1%	79%
Age					
<18	236 78%	44 15%	16 5%	7 2%	80%
18-19	693 77%	145 16%	52 6%	7 1%	78%
20-24	694 77%	148 16%	55 6%	4 1%	77%
25-29	243 78%	35 11%	25 8%	9 3%	80%
30-39	243 84%	30 10%	11 4%	4 1%	86%
40-49	123 82%	17 11%	9 6%	1 1%	83%
50-59	50 78%	6 9%	6 9%	2 3%	81%
>59	30 88%	3 9%	1 3%	0 0%	88%

AVAILABILITY AND HELPFULNESS OF FACULTY

- 72% of the survey respondents using this service were satisfied/very satisfied with the availability and helpfulness of faculty members outside of class; however, only 8% indicated that they were dissatisfied/very dissatisfied. 18% of the respondents were neither satisfied nor dissatisfied.

Table 12

Level of Satisfaction with Availability and Helpfulness of Faculty Outside of Class

	Satisfied/Very Satisfied	Neutral	Dissatisfied/Very Dissatisfied	Not Used	Satisfaction Of Those Using Service
Total Respondents	2,030 64%	560 18%	249 8%	312 10%	72%
Ethnicity					
African American	575 70%	150 19%	51 6%	42 5%	74%
Asian	91 63%	37 26%	9 6%	7 5%	66%
Hispanic	316 65%	90 19%	40 8%	37 8%	71%
Native American	11 69%	2 13%	0 0%	3 19%	85%
Other	89 1%	26 19%	16 12%	7 5%	68%
White	860 66%	234 18%	120 9%	84 6%	71%
Gender					
Male	868 69%	229 18%	95 7%	81 6%	73%
Female	1,140 66%	328 19%	153 9%	109 6%	70%
Age					
<18	199 39%	48 16%	27 9%	29 10%	66%
18-19	578 64%	185 21%	75 8%	60 7%	69%
20-24	600 66%	188 21%	73 8%	44 5%	70%
25-29	207 66%	51 16%	30 10%	25 8%	72%
30-39	219 76%	38 13%	19 7%	12 4%	79%
40-49	107 71%	23 15%	13 9%	7 5%	75%
50-59	44 68%	9 14%	6 9%	6 9%	79%
>59	21 68%	2 6%	2 6%	6 19%	84%

ATTITUDE OF EMPLOYEES OTHER THAN FACULTY TOWARDS STUDENTS

- 71% reported satisfaction with the attitude of employees towards students.
- The satisfaction level for those males using service was 73% while females were 69%.

Table 13

Level of Satisfaction with Attitude of Employees other than Faculty Towards Students

	Satisfied/Very Satisfied	Neutral	Dissatisfied/Very Dissatisfied	Not Used	Satisfaction Of Those Using Service
Total Respondents	1,972 68%	591 20%	201 7%	127 4%	71%
Ethnicity					
African American	557 68%	176 22%	41 5%	40 5%	72%
Asian	87 60%	41 28%	9 6%	8 6%	64%
Hispanic	323 68%	100 21%	38 16%	17 4%	70%
Native American	13 76%	1 6%	1 6%	2 12%	87%
Other	97 70%	22 16%	13 9%	6 4%	73%
White	895 69%	251 19%	99 8%	54 4%	72%
Gender					
Male	892 70%	248 19%	81 6%	54 4%	73%
Female	1,140 66%	375 22%	130 8%	77 4%	69%
Age					
<18	207 70%	55 19%	20 7%	15 5%	73%
18-19	605 67%	193 21%	59 7%	42 5%	71%
20-24	576 64%	218 24%	79 9%	30 3%	66%
25-29	216 69%	57 18%	23 7%	16 5%	73%
30-39	213 74%	45 16%	16 6%	12 4%	78%
40-49	101 68%	28 19%	10 7%	9 6%	73%
50-59	46 71%	12 18%	5 8%	2 3%	73%
>59	28 82%	4 12%	0 0%	2 6%	

CCBC RESPONSIVENESS TO STUDENTS

- Eighty-three percent of the survey respondents indicated that CCBC was helping them to meet their goals.

Table 14

CCBC Responsiveness to Students

	Strongly Agree/ Agree	Neutral	Disagree/ Strongly Disagree	No Response
CCBC is helping me meet my goals	2,622 83%	417 13%	88 3%	24 1%
CCBC has met my expectations for quality	2,238 71%	688 22%	185 6%	40 1%
CCBC is supportive of learning	2,544 81%	475 15%	84 3%	48 2%
CCBC is responsive to concerns of minority students	1,632 52%	1,301 41%	116 4%	102 3%
Program requirements are clear and reasonable	2,242 71%	649 21%	206 7%	54 2%