Illinois Community College Board Fiscal Year 2005

Accountability And Productivity

In The Community College System
November 2005

Illinois Community College Board

ACCOUNTABILITY AND PRODUCTIVITY IN ILLINOIS COMMUNITY COLLEGES Fiscal Year 2005

TABLE OF CONTENTS

<u>l</u>	<u>Page</u>
Introduction	. 1
Analyses of the Results of Fiscal Year 2005 College Program Review	
Academic Program Review	. 1
Adult Education and Family Literacy, English as a Second Language,	
and Developmental Education Program Review	. 8
Career and Technical Education Program Review	. 10
Summaries of the Career and Technical Education Program Reviews	
Ag Business Management	. 10
Ag Business /Agri-business Operations	. 11
General Ag Production and Management	. 12
Ag Animal Husbandry and Production Management	. 13
Equine Science, Horse Management, and Equestrian Training	. 13
General Horticulture Services Operations and Management	
Arboriculture	. 15
Landscaping Operations and Management	15
Turf Management	. 16
Forest Harvesting and Production Technology	. 17
Wildlife and Wildlands Management Technology	. 17
Fashion Merchandising	. 18
Entrepreneurship Studies	. 19
Financial Services Marketing Operations	. 20
General Retailing Operations	. 20
General Marketing and Sales Operations	. 21
General Distribution Operations	. 22
Travel Services Marketing Operations	. 22
Water Quality and Wastewater Treatment Technology	
Environmental and Pollution Technology	
Elder Care Provider/Companion	
Custodial Maintenance	
Parks, Recreation, and Leisure Facilities Management	. 26

TABLE OF CONTENTS (Continued)

<u>F</u>	<u>age</u>
Summary of Analyses of Career and Technical Education Program Reviews and Recommendations	27
Summary and Conclusions	27
Appendix A - Community College Program Review Summary Tables	
Table A-1: List of Programs Reviewed by Community Colleges During FY 2005	31
Table A-2: Summary of FY 2005 Reviews of Occupational Programs by College	33
Table A-3: Occupational Programs Eliminated through Program Review in FY 2005	35

Illinois Community College Board

ACCOUNTABILITY AND PRODUCTIVITY IN ILLINOIS COMMUNITY COLLEGES FISCAL YEAR 2005

Introduction

Analyses of the Results of Fiscal Year 2005 College Program Reviews

In 1983, the Illinois Community College System began a broad-based accountability initiative through regular review of instructional, administrative, and support services programs. Today, the process continues to be a major accountability effort proven to be flexible enough to address the constantly changing policy issues and priorities of the various community college districts. To ensure that programs continue to meet the needs of both students and employers, colleges conduct a review of programs once every five years. The review is based on three criteria: program need, program cost, and program quality.

This report summarizes the results of academic, career and technical, adult education, and developmental education programs that were reviewed during fiscal year 2005. Summaries include both program strengths and the common challenges colleges face in keeping instruction relevant while maintaining cost-efficiency. Specific quality improvements at the local level are also highlighted. During fiscal year 2005, community colleges reviewed 199 academic, 469 career and technical, and 24 adult and developmental education programs. A table illustrating this information by college can be found in Appendix Table 1.

Academic Program Review

Community colleges review academic programs at least once every five years, and each college determines when such reviews occur. **This year 199 academic programs were reviewed and all were recommended for continuation with minor improvements.** Every reporting year, an array of innovative program improvements are described. In fiscal year 2005 reports, certain topics could be found across various discipline reviews. These include standardizing course outcomes, developing modes of delivering instruction through technology, taking a team approach to evaluating student work, creating course-related web sites, assessing student outcomes at both the course level and the program level, and standardized exams within disciplines.

Program Need. In general, the need for academic coursework is apparent, as it provides the foundation for all degrees, whether occupational or transfer. General education courses develop a breadth of knowledge essential to a greater understanding of the world in which we live — its presence in the universe, its peoples, its environment, and its complexities. For specific disciplines, colleges primarily examine enrollment and retention data to determine what program improvements may be necessary to validate program need.

The review of programs can identify the need for expanding technology, adding faculty, revising course schedules, establishing greater communication with part-time faculty to ensure consistency of experiences for students, eliminating some courses, adding others, and evaluating assessment methods.

Program Cost. Community college program review reports provide evidence that costs are generally in line with state averages. Variations arise when program faculty are adjunct or long-tenured, when costly expenditures such as major technological upgrades occur at one time, and when there are particularly high or low enrollments. Whenever possible, colleges use a competitive bidding process to purchase materials and supplies in order to streamline costs.

Program Quality in Communications: Courses in English composition and speech are the cornerstone of college curricula. A student who experiences difficulty in these courses is likely to be at a great disadvantage in other general education courses. Composition is a "vital educational component" for three student populations: those fulfilling general education requirements for transfer, those taking courses required in their major, and those enrolling in courses that support career and technical programs.

All community colleges address the needs of students by offering remediation, providing tutoring, and accommodating various learning styles. Writing centers that assist students with their assignments are common throughout the system.

In fiscal year 2005, 15 reports were received on communication courses and programs.

Triton College reports that, since the fall of 2002, typical communications courses for the Associate of Applied Science (career and technical) degrees have not been offered. More and more of the A.A.S. students are continuing their education at four-year institutions and need freshman (transfer) rhetoric to meet the four-year general education requirements.

As a required core course, speech can very often be a stumbling block for students. **Lincoln Land Community College** reported that its speech faculty have added sections that are targeted to students with extreme communication anxiety. The first four weeks of the semester are spent learning how to deal with negative cognitions. Students' reactions to the format are positive.

Speech faculty at **Black Hawk College**, including adjunct instructors, meet regularly to discuss base-line objectives and assessment techniques. Video feedback allows students to determine how well they have performed, and it demonstrates to faculty what concepts need to be reinforced. Examples and reflections by both students and faculty become part of the students' portfolio and visibly display progress.

Journalism is an area of communications that wavers between being a career and technical education course and a transfer course. **College of DuPage** reported that there has been a 37.15 percent increase in enrollment in its journalism program over the past five years. The increase is credited to offering the curriculum through independent learning and online instruction. Planning is underway to compare success rates of students in the traditional classroom and those in alternative delivery modes.

Program Quality in Social and Behavioral Science: Courses in this area of general education include anthropology, economics, history, human geography, political science, psychology, and sociology. The results of 59 discipline reviews were reported. Nearly every college had enrollment gains in the double digits since the last review five years ago.

Social and behavioral science courses prepare students for further study in the discipline and serve as support courses for other fields. For example, at the **College of Lake County**, one or more courses in psychology are recommended for transfer degrees in business, education, and various majors in social sciences and health care fields. Associate of Applied Science degree programs in Criminal Justice, Human Services, and Nursing are other programs that require coursework in this field.

Learning communities have been successful at numerous community colleges. In this method of instruction, faculty examine and illustrate concepts from disciplines that make instruction meaningful for students. In turn, students become problem solvers, participate in democratic discussions and cooperative processes, and initiate opportunities for self-learning. Over the past five years, **William Rainey Harper College** has developed learning communities uniting the disciplines of philosophy, psychology, business marketing, and business ethics. In a class featuring the "Simpsons" from the television program, a team of faculty uses segments of the show to stimulate student discussions.

Service learning provides a meaningful experience for the student and society. It can be critical in helping the student determine the right career choice. Service learning in psychology at the **College of DuPage** was expanded to include involvement with activities related to elder care, psycho-social rehabilitation, hospice, children's homes, and an aids society and a prevention program relating to gangs and drugs.

Grant programs offer unique opportunities for learning. A Historical and Policy Studies department at **Oakton Community College** received funding for a Great Books Project that encourages faculty and students to explore contemporary cultural themes through discussion of literary, historical, philosophical, and political texts foundational to the Western tradition. Students and faculty form a close intellectual community as they read and analyze provocative texts of powerful imagination and aesthetic beauty that have substantially influenced the development of both our society and its academic disciplines.

Every community college is deeply involved in assessment activities. Lake Land College's Instructional Improvement and Assessment Committee monitors the outcomes assessment process and acts as a catalyst for continual improvement. Learner competencies are updated on a yearly basis. Faculty discovered that students could cite factual information correctly, but had difficulty in expanding their thinking beyond this stage. Assignments to expand students' ability to explain concepts to others in their own words are being developed.

Program Quality in Physical and Life Science. Disciplines in this field include astronomy, physics, physical science, chemistry, geology, geography, and biology. Colleges reported the importance of these courses to support advanced classes in majors such as Nursing, Radiologic Technology, and Health Information Technology, all of which show strong labor market demand in Illinois. For

students who plan to enter these majors, but need a review of subject matter, **Danville Area Community College** offers a unique developmental course — GSCI 100, Simply Science — for students who plan to take additional transfer-level science courses.

To ensure student readiness for college-level work, a chemistry faculty member at **Southeastern Illinois College** plans to give, via the internet, a spring assessment test to students planning to enter General Chemistry (for majors) in the fall. Students who do not possess the knowledge base to succeed in this course will be identified and advised to enroll in a chemistry course for nonmajors.

Continuing in the area of assessment, **Spoon River College** reports recent completion of a pilot process for portfolio review. A portfolio checklist created by students, advisors, and faculty includes the core competencies and their objectives, the expectations for portfolio development, and the contents/artifacts to include in the portfolio. An evaluation rubric was developed for portfolio assessment that focuses on the student's selection of, and reflection on, the chosen artifacts for the core competencies. A group evaluation was held for each student's portfolio submission for this pilot project.

Prairie State College faculty in the Natural Sciences identified five general education learning objectives for science. They agreed that these provide students with a basic understanding of science so they can examine issues and make better decisions regarding environmental impact. They then wrote different sets of multiple choice questions for each area. Aggregated results will be used to improve teaching and learning.

Elgin Community College reports impressive enrollment gains between fiscal year 2001 and fiscal year 2004. For example, enrollment in physics was up 49.5 percent, biology increased 30 percent, chemistry increased 26.2 percent, geology saw a 34.6 percent increase, and earth science enrollment grew 58.4 percent. William Rainey Harper College, Olive-Harvey College, Black Hawk College, and Waubonsee Community College also saw significant enrollment gains.

Along with enrollments, community colleges examine retention figures to determine quality of instruction, program need, and cost-effectiveness. The **College of Lake County** attributes the low levels of attrition in geology to the efforts made by faculty on the first day of each semester in each class. Faculty articulate the requirements for successful completion, transferability, and graduation. All faculty have developed extensive field experience and have cultivated numerous industry, agency, and educational contacts.

Lewis & Clark Community College noted the difficulty in offering advanced classes in science due to insufficient enrollments. However, with new faculty and excellent facilities, the college now has the human and physical resources to offer the sequence of courses needed to attract and maintain science majors through completion of the Associate of Science and Associate in Engineering Science degrees.

Waubonsee Community College reported on a multi-faceted, institution-wide, faculty driven, quality improvement initiative with the acronym of "TOP". Its mission is to establish an institution-wide framework for outcomes that is guided by the college's mission and core values, providing a benchmark for effective teaching and learning and vehicles for communication of the same. TOP

is one of the college's three AQUIP action projects. A commitment to a holistic approach for assessing student outcomes is key. Thirty-eight reports were received on physical and life science courses and programs.

Program Quality in Humanities and Fine Arts: Forty-six program reports covered Humanities and Fine Arts programs. **William Rainey Harper College** allows opportunities for students and faculty to suggest changes to the curriculum that might improve music course offerings. Suggestions are considered in an open forum during regular monthly faculty meetings. In addition, a national association — the National Association of Schools of Music—regularly evaluates the curriculum and suggests improvements based on the experience of peer NASM institutions and the accrediting body. Furthermore, the department seeks information and advice about curriculum content and development from ten councils, associations, and leagues.

Addressing "Community" in community colleges, **Triton College**'s theatre program partnered with its Continuing Education Department to co-sponsor noncredit and credit course productions. This has encouraged more community participation for individuals pursing their drama interests on a personal and not academic basis.

Advisory committees are typically established for career and technical programs; however, **Black Hawk College** is considering developing an advisory committee for its Theatre program. In the area of assessment, faculty (including adjunct instructors) meet on a regular basis to discuss base-line objectives and assessment techniques that include testing, video taping, and group feedback critiques The college reports there is strong support for continuous quality improvement of student learning.

Lewis and Clark Community College faculty are encouraged to make professional development a priority. Unique among community college music faculty, more than 90 percent of Lewis and Clark's faculty members are active, professional performers. The department is planning to expand offerings to include Contemporary Commercial Music, including courses in nonclassical pedagogy and nonclassical vocal instruction in styles such as Jazz, Cabaret, Pop, Country, and Rock Ensembles.

McHenry County College reports growth in general education art and music course offerings. The discipline is closely tied to the community through efforts including Second Sunday Concert Series, Skyway Jazz Festival, and professional ensembles. In Art, community events and community service activities include rotating gallery exhibits, visiting artists, yearly art workshops, Clay Workers Guild of Illinois meetings, Fox Valley Conference High School Art Exhibition, Blue Sky Project, elementary and middle school art exhibits, Art Department Open House, Portrait in Print Collection, faculty jurors for local and regional art competitions and art fairs, consultants/resource people to members of the community, and benefit pottery sales.

Rock Valley College states that art courses continue to show a steady increase in enrollment. The credit hours generated in the 100 level courses have increased by 20.47 percent between 2002 and 2004, while the number of students enrolled increased by 21.53 percent. Credit hours generated in the 200 level art courses show a 39.81 percent increase and a 39.44 percent increase in the number of students enrolled. Even the most advanced course, ART 253, History of Art III, is at or near capacity through strategic scheduling. The result has been an improvement in cost-effectiveness.

Triton College reports that it plans to monitor progress and interest in the music production courses and evaluate the need or potential for a separate occupational certificate. The music department partners with the Continuing Education department to co-sponsor courses to encourage more community participation without the demand of credit coursework for those individuals pursuing their music on a personal and not professional basis.

Moraine Valley Community College art faculty have been involved with students on an extracurricular level through structured art competitions sponsored by the League of Innovation and college student art shows. These activities encourage student learning outside the classroom and generate students' interest in taking additional art classes. A Student Art Gallery was opened in 2003 giving students in art classes the opportunity to display their work to the public.

At Harry S Truman College, faculty are working with the Office of Instruction to reinstate the annual art show, juried by outside judges. Other projects include capstone activities and course portfolios that fulfill North Central Accreditation assessment activities for studio classes. The overall assessment plan is a set of documents that classroom faculty use to gain information and insights needed to improve teaching effectiveness and student learning. It consists of five, circularly connected processes that allow for better planning and allocation of college resources, ultimately leading to improved learning. Faculty have identified the need to engage in ongoing conversations and comparisons of success stories, develop strategies for implementing policies on attendance and plagiarism, increase historical awareness, and assist students in improving study skills.

Rock Valley College reports that the constant stream of new technology in the arts means that faculty need additional training to keep up with these trends.

Harold Washington College recommended changes for its Speech and Theatre programs that include collaboration with other departments such as Business, Social Work, and Business and Industry and Public Agency and Special Programs and establishing a Speech Communication and Theatre Arts Laboratory for students.

The **College of Lake County** reported on its foreign language programs. Its report states, "As great knowledge of different nations and cultures is required in business or diplomacy, the study of foreign languages and cultures will be increasingly recognized as highly advantageous to students competing in an increasingly global workforce." The addition of Arabic, Japanese, Italian and Chinese grew out of student demand, localized market analysis and the college's response to the possibility of job opportunities in emerging global economies.

Strengths of the Fine Arts program at **Highland Community College** include "contribution to the general education outcomes for college students, cultural enrichment for the college community, and commitment to the role of the arts in society by a talented faculty." Students are assessed in a preand post-test environment as to their development of an understanding and enjoyment of art, music, and theatre. Highland Community College's fine arts program supports the building communities philosophy through its cooperative projects with local schools and the broad range of generations it serves. Funding comes from various community and regional benefactors, a Trust, and members of the community. The college plans to investigate new program options, such as a vocational

certificate in music production, recording industry entry-level skills, and the entire new area of technology and music.

Program Quality in Mathematics: Colleges report that there is a need for the discipline based on enrollments, retention, and the preparedness level of freshmen, which is evidenced by performance in placement tests and national workforce math skills deficiencies. Over the five years the review covers, credit hours have increased steadily in developmental and college-level math courses. Five colleges submitted reports on mathematics programs.

The **College of DuPage** reports that developmental math credit hours are 46.1 percent of total math credit hours generated in 2003-2004. The college attributes increased costs to payment for tutoring services. Quality improvements that are planned include developing a process whereby prerequisite completion by students could be verified electronically.

Lewis and Clark Community College faculty are working on a new curricular project to review math and physics content needed by students in career programs and create a new integrated technical sequence. Many full-time math faculty keep a weekly office hour in the Math Center. They participate in tutor training and assist in recruiting. An increasing number of full-and part-time faculty members bring their students to the Math Center at the beginning of the semester or have math center specialists visit their classrooms to explain the services available to students.

McHenry County College plans to continue communication and interaction with local high schools, which includes yearly meetings with high school teachers, a high school pilot program that was designed to assist students in preparing for the math placement test and the writing of test questions for the Big Northern High School math competition test.

Black Hawk College developed an innovative means of math assessment. During the last week of the fall semester, students in Calculus III made 15-minute presentations to the Calculus I and II classes. They selected a small topic from their three semesters of calculus, explained why they thought it was interesting, and how it related to other courses they had taken. An unexpected outcome of this assessment was when a portion of these students took differential equations in the spring semester, students and the instructor agreed to continue the student presentation idea by having two-person student teams present the course material.

Adult Education and Family Literacy, English as a Second Language, and Developmental Education Program Review

Colleges are required to review their Adult Education and Family Literacy, English as a Second Language (ESL) and Developmental Education programs at least once every five years, according to a schedule developed by each college. **This year, 24 related programs were examined and all were recommended for continuation with minor improvements.**

Adult Education and Family Literacy and English as a Second Language Programs

Adult Education and Family Literacy programs serve students 16 years of age and older who have less than a high school education and are no longer enrolled, or have never been enrolled, in school. The programs provide education and support services for students wishing to improve their basic skills or to acquire a high school diploma or its equivalent - General Education Development (GED). These programs may also serve students who are determined to, through a skills assessment, lack the basic skills necessary to succeed in employment or further education and training. ESL programs serve non-native English speaking students by providing reading, writing, and math instruction for gaining or improving English language skills. Students may take related instruction through programs offered by community colleges, community-based organizations, or other educational agencies. Seven colleges reported on programs in these categories.

According to the 2005 Data and Characteristics of the Illinois Community College System, 16,749 students were enrolled statewide in ABE/ASE programs at community colleges during fiscal year 2004, and 33,242 students were enrolled in ESL programs at community colleges during the same period.

Program Need: All colleges reporting indicated a need for Adult Education and Family Literacy programs. Enrollments were noted as stable or increasing among all levels of Adult Basic Education (ABE), Adult Secondary Education (ASE) and English as a Second Language (ESL) programs. Census data and other community survey information supports the need for these programs in all of the districts reporting. **Triton College** reported a 41 percent increase in ABE/ASE programs since fiscal year 2004, and **Moraine Valley Community College** indicated that the foreign-born population their district serves accounted for 57 percent of the district's growth in the last ten years.

Program Cost: All colleges reporting indicated their programs were cost-effective.

Program Quality: Colleges identified common strengths as experienced and dedicated full- and part-time faculty and volunteer staff, flexible eight-week schedules, multiple instructional sites, and access to student support services. Retention rates illustrate the quality and effectiveness of these programs, and several colleges reported retention of their ABE/ASE/ESL students between 60-80 percent through their final course. Common program weaknesses include the need for accommodating increasing enrollments, either through additional staff and/or additional classroom space, and decreases in grant funding.

Specific quality improvements identified by the colleges include **Triton College's** pilot test of Learning Communities and **Morton College's** attempt to transition more GED graduates into credit courses. **Prairie State College** began offering field trips every eight weeks for students who have

perfect attendance in an effort to improve attendance and retention rates. **Danville Area Community College** piloted a citizenship course with the assistance of a corporate grant. **Richland Community College and Lewis & Clark Community College** plan to increase their marketing and recruitment efforts. **Moraine Valley Community College** implemented a plan to better organize placement testing and tracking.

Developmental Education Programs

Community college developmental education programs are essential to serve students whose skills in English, mathematics, or reading are below college level in order to provide them with the opportunity to be successful in college. Community colleges provide the vast majority of the state's developmental education courses. **During fiscal year 2005, six colleges reviewed their developmental education programs.**

Program Need: All colleges reporting indicated stable or increasing enrollments in developmental education courses, with math and writing being the most common areas for remediation. Several colleges reported that a substantial portion of all enrollments in math occur in developmental courses. Retention rates were generally lower for developmental courses than for college-level courses; however, a few college reports documented improvement in the rate at which students successfully completed developmental coursework. Colleges have also focused attention on student outcomes in subsequent college-level courses to increase efforts to improve programs and policies.

Program Cost: All colleges reporting indicated that developmental education programs are cost-effective. Colleges attributed lower-than-average program costs to large enrollment and heavy reliance on adjunct faculty. Conversely, colleges attributed higher-than-average program costs to the use of full-time faculty and/or small class sizes, which they felt contributed to the quality and effectiveness of the programs. The colleges still considered these programs to be cost-effective in relation to the size and needs of the population served.

Program Quality: Colleges identified common program strengths as highly qualified and dedicated faculty and staff, flexible scheduling at multiple locations, the availability of student services, and the use of technology to provide access and supplemental self-paced tutorials. Weaknesses most commonly identified include lack of full-time faculty and the need for greater collaboration between part-time and full-time faculty to support transition of students to college-level courses. Specific quality improvements identified by the colleges include **Harper College's** implementation of online and blended course delivery.

Career and Technical Education Program Review

All career and technical education programs are reviewed within a five-year period. Each year, community colleges review specific career and technical education programs and submit their findings to the Illinois Community College Board. **This year, 469 career and technical education programs were reviewed at the colleges.**

Based on the analysis of their program review outcomes, colleges can elect to (1) continue programs with minor improvements, (2) continue programs with significant modifications, (3) discontinue or eliminate programs, or (4) schedule programs for further review. Reasons for modifying programs might include updating a curriculum to better suit the needs of local business, while elimination of programs might be based on low enrollments and high costs. Many colleges choose to address these concerns through further review of their programs. According to the program review summaries provided by each college, 392 career and technical education programs were continued with minor improvements, 12 programs were significantly modified, 51 programs were identified for elimination, and 14 programs were scheduled for further review during the coming year. A table illustrating this information can be found in Appendix Table 2, and a list of curricula identified for elimination can be found in Appendix Table 3.

<u>Summaries of the Career and Technical Education Program Reviews Conducted</u> <u>during Fiscal Year 2005</u>

Please note: For all of the following career and technical education program summaries, the number of colleges offering training may not match the number of colleges that reported on the program status chart. This is because some programs are currently inactive, are too new to conduct a meaningful review, colleges reported in the summary may offer more than one program in that specific program area, or colleges may have notified ICCB of circumstances that warrant postponing the review.

In program summaries where information from the Follow-Up Study of Career and Technical Education Program Graduates is "N/A" (Not Available), there were either too few respondents to the Follow-Up Survey for inclusion in the report or the specific program category is an Illinois-specific classification. This means that Follow-Up Survey data is not broken down by specific program category, but has been combined with its related national program category for which data is available.

Furthermore, for program areas where college reports were not submitted or information was insufficient, no statewide summary for that program area has been provided.

Agricultural Business Management (CIP 01.0101)

Programs that prepare individuals with a broad range of knowledge and skills in organizing, operating, and managing agricultural and related businesses and services.

Number of Colleges Offering Training	18
2004 Follow-up respondents employed of continuing education	95.6%
2004 Follow-up respondents working full-time	81.8%
2004 Follow-up respondents working in related jobs	89.7%

Results of this Year's Program Review: As a result of this year's program review, eleven colleges reported plans to continue their General Agricultural Business and Management programs implementing minor improvements, one college reported implementing significant modifications, and one college reported plans to discontinue its General Agricultural Business program.

Program Need: The Illinois Department of Employment Security data indicates no change in the projected employment between 2002 and 2012. However, areas of the state show a growth in this area of 6-12.14 percent in agriculture-related occupations. The Occupational Information System for Illinois shows a steady demand for agriculture management-related occupations. Furthermore, several agricultural industry sources report a steady demand for agricultural farm/nonfarm managers.

Program Cost: All colleges continuing their programs report them to be cost-effective. The use of part-time faculty has aided in the cost effectiveness. The college that reported its program to not be cost effective will be looking at adding part-time faculty to replace retiring full-time faculty and moving to online courses to reduce cost.

Program Quality: Common program strengths include well-qualified instructors, modern instructional facilities, business partnerships, and availability of internships for students. Colleges reported lack of adequate space and lack of adequate marketing as weaknesses of the program.

Agricultural Business/Agri-business Operations (CIP 01.0102)

Programs that prepare individuals to manage agricultural businesses and related operations, including those within diversified corporations.

Number of Colleges Offering Training	2
2004 Follow-up respondents employed of continuing education	NA
2004 Follow-up respondents working full-time	NA
2004 Follow-up respondents working in related jobs	NA

Results of this Year's Program Review: As a result of this year's program review, two colleges reported plans to continue their Agricultural Business and Agri-business programs implementing minor improvements, one college reported implementing significant modifications, and one college reported plans to discontinue its General Agricultural Business program.

Program Need: The Illinois Department of Employment Security data indicates no change in the projected employment between 2002 and 2012 for agri-business-related occupations. Enrollments in related courses remain steady as do program completions and placements.

Program Cost: All colleges continuing their programs report them to be cost-effective. The use of part-time faculty has aided in the cost effectiveness.

Program Quality: Common program strengths include well-qualified instructors, modern instructional facilities, business partnerships, and availability of internships for students. Colleges reported lack of adequate space and lack of adequate marketing as weaknesses of the program.

Specific quality improvements for general agriculture business management include **Richland Community College** and **Danville Area Community College's** incorporation and expansion of dual credit opportunities for students.

General Ag Production and Management (CIP 01.0301)

Programs that prepare individuals for working in and/or managing ag production operations, such as crop and animal farming.

Number of Colleges Offering Training	13
2004 Follow-up respondents employed of continuing education	97.4%
2004 Follow-up respondents working full-time	82.9%
2004 Follow-up respondents working in related jobs	75.9%

Results of this Year's Program Review: As a result of this year's program review, seven colleges reported plans to continue their General Agriculture Production Workers and Managers programs implementing minor improvements. One college reported planning to review its program in the upcoming year.

Program Need: The Illinois Department of Employment Security data indicates a 12 percent increase in the projected employment between 2002 and 2012. The Occupational Information System for Illinois shows a steady demand for agriculture management-related occupations. Enrollments in related courses have remained steady since the last review cycle.

Program Cost: All colleges reported their programs to be cost-effective. The use of part-time faculty was cited as aiding in the cost effectiveness.

Program Quality: Common program strengths include highly qualified instructors and staff, modern instructional facilities and labs, business partnerships, and availability of internships for students. Colleges reported faculty retirements and lack of adequate marketing for recruitment as weaknesses of the program.

Specific quality improvements for general agriculture production worker and managers include **Lake Land College**'s expansion of its Land Laboratory. **Black Hawk College** plans to institute lab fees and share expenses for equipment among several curriculum areas. **John Wood Community**

College plans to improve marketing and recruitment by implementing a Student Ambassador Pilot program.

Ag Animal Husbandry and Production Management (CIP 01.0302)

Programs that prepare individuals for managing the selection, breeding, care of and marketing of animal livestock and small farm animals.

Number of Colleges Offering Training	6
2004 Follow-up respondents employed of continuing education	NA
2004 Follow-up respondents working full-time	NA
2004 Follow-up respondents working in related jobs	NA

Results of this Year's Program Review: As a result of this year's program review, two colleges reported plans to continue their Agriculture Animal Husbandry and Production Management programs implementing minor improvements.

Program Need: The Illinois Department of Employment Security data indicates a 9 percent increase in the projected employment between 2002 and 2012. The Occupational Information System for Illinois shows a steady demand for agriculture management-related occupations. Furthermore, several agricultural industry sources report a steady demand for agricultural farm/nonfarm managers.

Program Cost: All colleges reported their programs to be cost-effective. The use of part-time faculty was cited as aiding in the cost effectiveness.

Program Quality: Highly qualified instructors and staff, modern instructional facilities, community need, and availability of internships for students were all cited as strengths of the programs. Colleges reported funding for transportation to sites and cost for specialized equipment as weaknesses of programs.

Specific quality improvements for general agriculture production worker and managers include **Joliet Junior College's** plans to increase written and performance based testing for both laboratory and lecture coures.

Equine Science, Horse Management, and Equestrian Training (CIP 01.0507)

Programs that prepare individuals to care for horses and horse equipment; ride and drive horses for leisure, sport, show, and professional purposes; and manage the training of horses and riders.

Number of Colleges Offering Training	4
2004 Follow-up respondents employed of continuing education	100%
2004 Follow-up respondents working full-time	62.5%
2004 Follow-up respondents working in related jobs	50.0%

Results of this Year's Program Review: As a result of this year's program review, one college reported plans to continue its Equestrian/Equine, Horse Management, and Training program implementing minor improvements.

Program Need: The Illinois Department of Employment Security indicates a steady demand for agriculture management related occupations through 2012. Furthermore, several agricultural industry sources report a steady demand for agricultural farm/nonfarm managers. Equine studies is a subset of agricultural management that requires specialized training and skills. Locally, **Black Hawk College** reports a continued interest in this program. Enrollments in related courses have remained steady since the last review cycle.

Program Cost: **Black Hawk College** reported its program to be cost-effective.

Program Quality: Black Hawk College cited highly qualified instructors, a nationwide work experience program, and extensive extracurricular activities as strengths of the programs. The college reported costs for specialized equipment as a weakness of the program.

General Horticulture Services Operations and Management (CIP 01.0601)

Programs that prepare individuals for the general production and processing of domesticated plants and flowers, shrubs and trees, and related plant materials. Also includes instruction in the management of horticulture services businesses.

Number of Colleges Offering Training	21
2004 Follow-up respondents employed of continuing education	90.0%
2004 Follow-up respondents working full-time	70.7%
2004 Follow-up respondents working in related jobs	80.0%

Results of this Year's Program Review: As a result of this year's program review, eleven colleges reported plans to continue their General Horticulture Services, Operation, and Management programs implementing minor improvements. One college plans to make significant changes to its program. Three colleges plan to discontinue their Horticulture programs, and two colleges plan to review their programs in the upcoming year.

Program Need: The USDA and Economic Research Service notes the nursery and greenhouse industry comprises the fastest growing segment of U.S. Agriculture. The Illinois Department of Employment Security indicates the number of jobs in the Horticulture field are "expected to grow faster than average through the year 2012." The Occupational Information System for Illinois shows a steady demand for Horticulture management-related occupations.

Program Cost: Seventeen colleges reported their programs to be cost-effective. One college reported that its program was not cost effective citing instructional cost.

Program Quality: Highly qualified instructors and staff, modern instructional facilities, community need, and availability of internships for students were all cited as strengths of the programs. Colleges reported aging facilities and cost for specialized equipment as weaknesses of their programs.

Specific quality improvements for general horticulture workers and managers include **Illinois Central College's** plans to explore the possibility of making Horticulture a regional program after receiving a five-year accreditation from the Associated Landscape Contractors of America. **Kishwaukee College** is in the process of developing a plan of action for replacement/renovation/updating of greenhouse spaces. **Triton College** has recently developed a new course — Plants and Society — that has been approved as an IAI life science education alternative, providing students with another option to meet their science requirement.

Arboriculture (CIP 01.0602)

Programs that prepare individuals for cultivating trees and shrubs for ornamental purposes.

Number of Colleges Offering Training	2
2004 Follow-up respondents employed of continuing education	NA
2004 Follow-up respondents working full-time	NA
2004 Follow-up respondents working in related jobs	NA

Results of this Year's Program Review: As a result of this year's program review, one college reported plans to continue its Arboriculture program implementing minor improvements.

Program Need: The Illinois Department of Employment Security indicates an average growth in the employment of arborists between 2002 -2012. Locally, the **College of Lake County** maintains there is a continued interest among students and the community for these courses and programs.

Program Cost: The **College of Lake County** reported its program to be cost-effective.

Program Quality: The **College of Lake County** cites highly qualified instructors, community support, and dedicated lab facilities as strengths of the programs. The college reported a need for updated equipment and difficulty with assessment as weaknesses of the program.

Landscaping Operations and Management (CIP 01.0605)

Programs that prepare individuals to manage and maintain indoor and/or outdoor ornamental plants and related plant materials and landscapes designed by landscape architects, building contractors, or individual clients (commercial or private).

Number of Colleges Offering Training	13
2004 Follow-up respondents employed of continuing education	85.7%
2004 Follow-up respondents working full-time	95.0%
2004 Follow-up respondents working in related jobs	68.4%

Results of this Year's Program Review: As a result of this year's program review, four colleges reported plans to continue their programs in Landscaping Operations and Management with only minor improvements, and two colleges reported plans to discontinue programs in this area.

Program Need: According to the Illinois Department of Employment Security, growth in the employment of "landscape architects and designers" is anticipated to increase more than twice as fast as the average growth for all occupations statewide through 2012. Locally, colleges indicated there is a consistent interest for this program. Enrollments have remained fairly stable over the last five years for those colleges that reported plans to continue their programs. Colleges discontinuing programs cited very specific programmatic issues, such as loss of a major employer who supported the college's related certificate program.

Program Cost: Average unit cost for horticulture programs varies by district. While several colleges reported lower than the statewide average for unit cost in this program area, several others reported much higher than average costs. This was primarily due to faculty salaries and low enrollments.

Program Quality: Common strengths of landscape operations and management programs include highly qualified instructors and staff, modern instructional facilities, community need, and availability of internships for students. Colleges reported aging facilities and costs for specialized equipment as weaknesses of their programs. **Illinois Central College** reported on the success of its Horticulture Club in providing plants for purchase during the holidays and sponsoring a Haunted Forest open to the community.

Turf Management (CIP 01.0607)

Programs that prepare individuals for the installation, care and maintenance of ornamental or recreational grasses, such as those used for golf courses, parks, and athletic fields.

Number of Colleges Offering Training	12
2004 Follow-up respondents employed of continuing education	NA
2004 Follow-up respondents working full-time	NA
2004 Follow-up respondents working in related jobs	NA

Results of this Year's Program Review: As a result of this year's program review, one college reported plans to continue their Turf Management program implementing minor improvements.

Program Need: The USDA and Economic Research Service note the nursery and greenhouse industry comprises the fastest growing segment of U.S. Agriculture. The Illinois Department of Employment Security indicates the number of jobs in the horticulture field are "expected to grow faster than the average through the year 2012" with a 19.02 percent increase in occupations from 2002-2012. Enrollments in related courses have remained steady, as have completions and placements for this program area over the last several years.

Program Cost: Illinois Central College reported its program to be cost-effective.

Program Quality: Illinois Central College cited hands on experience, an association with the Landscape Contractors of American accredited program, highly qualified instructors and staff, modern instructional facilities, and community need as strengths of the programs.

Forest Harvesting and Production Technology (CIP 03.0401)

Programs that prepare individuals for assisting in the management and production of forest resoures. Includes instruction in woods and field skills, tree identification, timber measurement, logging and timber harvesting, forest propagation, and re-generation.

Number of Colleges Offering Training	1
2004 Follow-up respondents employed of continuing education	NA
2004 Follow-up respondents working full-time	NA
2004 Follow-up respondents working in related jobs	NA

Results of this Year's Program Review: As a result of this year's program review, one college reported plans to continue its Forestry Technology program implementing minor improvements.

Program Need: The Illinois Department of Employment Security data indicates a -2.25 percent decrease in occupations related to Forest Technology between 2002-2012. Locally, while the need for this training exists, student interest remains low.

Program Cost: Southeastern Illinois College reported a high unit cost for this program. Maintenance of equipment and program costs related to the update of curriculum and administrative expenses were cited as reasons for the increased cost.

Program Quality: Southeastern Illinois College cites curriculum revisions and articulated courses as strengths of the programs. The college reported a lack of enrollment as a weakness of program.

Wildlife and Wildlands Management Technology (CIP 03.0601)

Programs that prepare individuals to conserve and manage wilderness areas and wildlife reserves for recreational, commercial and ecological purposes.

Number of Colleges Offering Training	2
2004 Follow-up respondents employed of continuing education	100%
2004 Follow-up respondents working full-time	100%
2004 Follow-up respondents working in related jobs	40.0%

Results of this Year's Program Review: As a result of this year's program review, one college reported plans to continue its Wildlife and Wildlands Management program implementing minor improvements.

Program Need: The Illinois Department of Employment Security data indicate a stable market for the wildlife and wildlands management occupations between 2002-2012. Enrollments in related courses have remained steady since the last review cycle.

Program Cost: Southeastern Illinois College reported its program to be cost-effective and cited scholarship money for internships as a key support for the program.

Program Quality: Southeastern Illinois College cited hands on experience, a uniqueness of the program, and a year-long internship as strengths of the programs. The college reported a need for updated equipment and lab facilities as weaknesses of program.

Southeastern Illinois College plans to develop a web page and a shooting lab area for the program.

Fashion Merchandising (CIP 08.0102)

Programs that prepare individuals to promote product lines/brands and organize promotional campaigns at the wholesale level to attract retailer interest, wholesale purchasing and supply contracts.

Number of Colleges Offering Training	6
2004 Follow-up respondents employed of continuing education	100%
2004 Follow-up respondents working full-time	54.5%
2004 Follow-up respondents working in related jobs	63.6%

Results of this Year's Program Review: Four colleges reported plans to continue their programs in Fashion Merchandising with minor improvements, and one reported plans to discontinue its program.

Program Need: According to the Illinois Department of Employment Security, employment projections for positions as Merchandise Displayers and Window Trimmers are expected to grow at a rate of 15.2 percent between the years 2002 and 2012. **Harper College** reported that five other Illinois community colleges offer programs in Fashion Merchandising through a partnership with Harper and that 75 percent of the graduates work in a related field. **Waubonsee Community College** plans to discontinue its program in fiscal year 2006 due to low enrollments.

Program Cost: The colleges planning on continuing their programs in Fashion Merchandising reported that they are cost-effective. However, some colleges reported that costs are rising due to the need to upgrade laboratory space in order to keep current with industry trends.

Program Quality: Well-prepared faculty, engaged advisory committees, and a strong connection with local retail establishments were cited numerous times as strengths of these programs. Additionally, **Harper College** reports that its program has consistently won top awards through the Fashion Group Foundation.

Entrepreneurship Studies (CIP 08.0301)

Programs that prepare individuals to plan and develop, market and manage functions associated with owning and operating a business.

Number of Colleges Offering Training	11
2004 Follow-up respondents employed of continuing education	100%
2004 Follow-up respondents working full-time	50.0%
2004 Follow-up respondents working in related jobs	80.0%

Results of this Year's Program Review: Three colleges reported plans to continue their programs in Entrepreneurship with minor improvements.

Program Need: Given the broad scope of Entrepreneurship programs, they can be difficult to categorize into standard Illinois Department of Employment Security classifications; however, the colleges reporting cite tremendous growth. The **College of DuPage** reported that its program enrollments increased more than 310 percent during the reporting period, while **Lake Land College**'s program enrollments increased 250 percent.

Program Cost: Colleges reported these programs as generally cost-effective. **South Suburban College** states that Entrepreneurship is one of its lowest cost Business programs due to the lack of unique needs (hardware, software, classroom space, etc.).

Program Quality: Well-qualified faculty and the overall flexibility of these programs were cited as strengths of these programs. **South Suburban College** offers a series of one-credit hour courses in a compressed time format.

Financial Services Marketing Operations (CIP 08.0401)

Programs that prepare individuals for performing marketing tasks specifically related to banks and financial service institutions.

Number of Colleges Offering Training	2
2004 Follow-up respondents employed of continuing education	NA
2004 Follow-up respondents working full-time	NA
2004 Follow-up respondents working in related jobs	NA

Results of this Year's Program Review: One college reported plans to discontinue its programs in Financial Services Marketing Operations, and one college reported plans to schedule its program for further review.

Program Need: Rock Valley College cited low enrollments and a lack of need as reasons to withdraw its Financial Services Marketing Operations programs in January 2002. **Triton College** reported that its program has had low enrollments and no completers over the past five years. This, along with an overall decrease in business programs enrollments over the past five years, has spurred the college to review all business-related programs in fiscal year 2006.

Program Cost: Triton College reported that its program was cost-effective due to the reliance on traditional lecture courses already offered through accounting and business disciplines.

Program Quality: Triton College notes that courses in Financial Services Marketing Operations provide students with the option to transfer and continue their education at four-year institutions.

General Retailing Operations (CIP 08.0705)

Programs that prepare individuals to perform tasks specifically related to retail operations, such as store location and organization, buying and merchandising, pricing strategies, promotion and advertising, personnel management, and regulatory compliance.

Number of Colleges Offering Training	17
2004 Follow-up respondents employed of continuing education	82.9%
2004 Follow-up respondents working full-time	73.1%
2004 Follow-up respondents working in related jobs	55.0%

Results of this Year's Program Review: Eight colleges reported plans to continue their programs in General Retailing Operations with minor improvements, one of those colleges reported plans to schedule a program for further review in the coming year, and one college reported plans to discontinue its program.

Program Need: According to the Illinois Department of Employment Security, employment projections for positions as Retail Salesperson are expected to grow at a rate of 9.56 percent between the years 2002 and 2012. **Wabash Valley College** reports a 90 percent job placement rate and strong demand for program graduates from local employers. However, several colleges did report a slight decline in enrollments in recent years.

Program Cost: The colleges planning on continuing their programs in General Retailing Operations reported that they are cost-effective. In most cases, the unit costs for these programs were below the college average, as well as the overall state average. **Moraine Valley Community College** noted that program costs are kept low by utilizing an effective mix of full- and part-time faculty. **Illinois Central College** points to the lack of special equipment needs as another reason why costs are low.

Program Quality: Highly qualified faculty, low student/faculty ratios, and established relationships with local high schools are cited as strengths of these programs. **Illinois Central College** has developed articulation agreements with various private universities in the area, allowing students to continue the program towards a bachelor's degree. **Wabash Valley College** offers two internship opportunities which give students experience in their chosen career areas.

General Marketing and Sales Operations (CIP 08.0706/08.0708)

Programs that prepare individuals for promoting, advertising, and persuading consumers in retail markets. Includes instruction in sales presentation, customer service, post-sales and legal/ethical issues.

Number of Colleges Offering Training	28
2004 Follow-up respondents employed of continuing education	95.5%
2004 Follow-up respondents working full-time	92.5%
2004 Follow-up respondents working in related jobs	80.0%

Results of this Year's Program Review: Fifteen colleges reported plans to continue their programs in General Marketing and Sales Operations with minor improvements, three colleges reported plans to discontinue programs in this area, four others scheduled programs for further review, and one additional college significantly modified a program.

Program Need: According to the Illinois Department of Employment Security, employment projections for positions as Marketing Managers are expected to grow at a rate of 14.78 percent between the years 2002 and 2012. However, growth projections for Sales and Related Occupations are only projected to increase by 9.77 percent for the same time period. **McHenry County College** noted that its programs have increased enrollment by 65 percent since 1999, and the **College of DuPage** reported 80.47 percent growth. The colleges attributed this growth to many factors, most notably a rise in student interest in e-commerce and other related interactive marketing fields. This enrollment trend is not, however, being experienced statewide. A few colleges, including **Moraine Valley Community College** and **Harold Washington College** saw their enrollments drop sharply during the review period. In general, this decline was blamed on a lack of demand and low student interest.

Program Cost: The colleges planning on continuing their programs in General Marketing and Sales Operations reported that they are very cost-effective. This is due to the fact that the programs are often composed of courses offered through various other business programs and that these courses usually do not require special equipment or laboratory space.

Program Quality: In general, colleges reported that their programs in General Marketing and Sales Operations were successful due to dedicated faculty members who are active in their profession, proactive advisory committees, and strong connections with local business communities. The **College of DuPage** offers this program in many alternate modalities — including Fast Track, online, and independent learning — giving students a choice in selecting the methodology that best meets their personal needs. **Lewis and Clark Community College** offers several short-term certificates as a means of providing students with early recognition of their efforts. The courses in the short-term certificate can be applied to a degree, thus giving students many options to continue their studies after earning an initial certificate. **Illinois Valley Community College** builds student interest and future program enrollments by offering area high school students the opportunity to earn credit for two courses in the certificate program and three courses in the AAS program through a proficiency exam.

General Distribution Operations (CIP 08.0709)

Programs that prepare individuals for planning and organizing the logistics of product distribution to wholesale and retail buyers and/or clients.

Number of Colleges Offering Training	6
2004 Follow-up respondents employed of continuing education	85.7%
2004 Follow-up respondents working full-time	66.7%
2004 Follow-up respondents working in related jobs	83.3%

Results of this Year's Program Review: One college reported plans to continue its program in General Distribution Operations with minor improvements. Two colleges reported plans to discontinue their programs, and one of those colleges reported plans to continue a program with minor improvements.

Program Need: According to the Illinois Department of Employment Security, employment projections for positions as Transportation, Storage, and Distribution Managers are expected to grow at a rate of 14.09 percent between the years 2002 and 2012. **Oakton Community College** reports that program enrollment increased 50 percent from the 2000-2001 academic year. However, of the other two colleges reporting, one had just recently received ICCB approval and one indicated that its program had been inactive for several years.

Program Cost: Unit cost for the program at **Oakton Community College** has increased 27.5 percent from fiscal year 2003 to fiscal year 2004; however, the college still regards the program as cost-effective. **Richard J. Daley College** recently reopened its program and, therefore, unit cost data is not yet available.

Program Quality: Student satisfaction and success were cited by **Oakton Community College** as evidence of program quality. At **Richard J. Daley College**, an e-commerce component was added to the program as a result of the fiscal year 2000 review.

Travel Services Marketing Operations (CIP 08.1105)

Programs that prepare individuals to market, sell, and manage travel and tourism services and events.

Number of Colleges Offering Training	9
2004 Follow-up respondents employed of continuing education	87.5%
2004 Follow-up respondents working full-time	75.0%
2004 Follow-up respondents working in related jobs	48.2%

Results of this Year's Program Review: Four colleges reported plans to continue their programs in Travel Services Marketing Operations/Travel Agent with minor improvements, one reported plans to significantly modify its program, and one reported plans to discontinue its program.

Program Need: According to the Illinois Department of Employment Security, employment projections for positions as Travel Services Marketing Operations/Travel Agent are expected to decrease at a rate of 16.34 percent between the years 2002 and 2012. This decrease is attributed to the lasting effects of the 9/11 tragedy on tourism, as well as the increase in internet travel websites.

Program Cost: Three of the four colleges continuing programs in Travel Services Marketing Operations/Travel Agent described them as cost-effective. The other college cited the high cost of real-time airline ticketing systems as the main reason for increased costs. However, other colleges were able to reduce equipment costs by bringing students to local travel agencies to practice on industry computer systems.

Program Quality: Well-prepared faculty who are active travel agents, strong advisory committees, and the use of short-term certificates for quick entry into the workforce were cited as strengths of these programs. Additionally, the **College of DuPage** modified its program to focus on growth areas of the industry, such as conference planning and home-based travel sales. The program coordinator at **Moraine Valley Community College** sits on the American Society of Travel Agents National and Midwest Board of Directors.

Water Quality and Wastewater Treatment Technology (CIP 15.0506)

Programs that prepare individuals for assisting water quality engineers in planning and maintaining water storage processes and facilities, waterpower, and wastewater treatment systems.

Number of Colleges Offering Training	6
2004 Follow-up respondents employed of continuing education	NA
2004 Follow-up respondents working full-time	NA
2004 Follow-up respondents working in related jobs	NA

Results of this Year's Program Review: Three colleges submitted program review summary reports on their Wastewater Management programs. Two colleges reported plans to discontinue the program and one reported plans to continue with minor improvements.

Program Need: According to the Illinois Department of Employment Security, employment projections for Wastewater Treatment Plant and System Operators predict lower than average growth at 6.19 percent. Locally, reports show that colleges are showing very limited enrollments in the programs, but have well-attended individual courses. The two colleges reporting cancellation of the programs cited difficulty in finding qualified instructors to teach the courses and minimal interest in the community.

Program Cost: The college that is continuing the program with minor improvements reports that the program is cost-effective and that the tuition covers program costs. Colleges reporting discontinuation of the program report that it is not cost-effective due to low enrollments.

Program Quality: Common strengths reported by the colleges included quality instruction, facilities, and curriculum content. **Lake Land College**, the only college reporting continuation of the program, reports very strong student assessment within the program using Employer Follow-up

Surveys, Occupational and Student Satisfaction Surveys, and the Academic Profile Exam. The Instructional Improvement and Assessment Committee monitors this process and acts as a catalyst for continual improvement. Commonly reported weaknesses included overall program enrollment, program not supporting a need, finding qualified instructors, and driving distance for students interested in the program.

Environmental and Pollution Technology (CIP 15.0507)

Programs that prepare individuals for assisting environmental engineers in planning and developing indoor and outdoor environmental and pollution control systems.

Number of Colleges Offering Training	1
2004 Follow-up respondents employed of continuing education	NA
2004 Follow-up respondents working full-time	NA
2004 Follow-up respondents working in related jobs	NA

Results of this Year's Program Review: Only one college submitted a review summary report on its Environmental and Pollution Technology program and indicated plans to continue the program with minor improvements.

Program Need: According to the Illinois Department of Employment Security, employment projections for Environmental Scientists and Protection Techs predict much higher than average growth at 27.58 percent. **Wright College** reported a slight dip in enrollment due to the loss of the sole full-time faculty number in spring 2003, but still shows a high enrollment with an excellent retention rate of 93 percent.

Program Cost: The college that is continuing the program with minor improvements reports that the program is cost-effective. Only adjunct faculty teach the courses, and grant and contract funds enhance the program's budget, greatly reducing the unit cost.

Program Quality: The program at **Wright College** is the only environmental technology credit program in the state of Illinois. This program attracts workers seeking to build skills to enhance their chances for career growth. It has also succeeded in winning numerous grant and contract awards. Reported weaknesses included the fluctuation of job opportunities driven by the regulatory environment, lack of full-time faculty, and unchanging course offerings. Quality improvements recommended by the college include hiring a full-time faculty member in the program and development of new courses, specifically "Introduction to Atmospheric Sciences". **Wright College** is in the process of developing a new six-class certificate program focusing on sustainable energy technology and has developed an articulation agreement with Chicago State University.

Elder Care Provider/Companion (CIP 20.0602)

Programs that prepare individuals for providing basic assistance and treatment of the elderly and/or developmentally disabled adults.

Number of Colleges Offering Training	4
2004 Follow-up respondents employed of continuing education	NA
2004 Follow-up respondents working full-time	NA
2004 Follow-up respondents working in related jobs	NA

Results of this Year's Program Review: Out of the two colleges that submitted a program review summary report on their Elder Care Provider/Companion program, one college plans to continue its program with minor improvements and one reported that the program would be discontinued.

Program Need: According to the Illinois Department of Employment Security, employment projections for Personal and Home Care Aides predict much higher than average growth at 26.34 percent. The program at **Lewis & Clark Community College** is offered as an online program and has shown consistent enrollment with approximately 15 completers, all employed in the geriatric nursing field.

Program Cost: The college that is continuing the program with minor improvements reports that the program is cost-effective. However, since the program's cost is covered within the nursing program, it is not possible to identify the exact unit cost.

Program Quality: The program at **Lewis and Clark Community College** is very convenient due to its online format, attracts students nationwide, serves a need for working with the aging population, and offers a certificate for completers. There are some communication problems between student and instructor due to the online nature of the course. Quality improvements made by the college included providing a direct link to the its library system to provide current full-text journals with up-to-date information.

Custodial Maintenance (CIP 20.0604)

Programs that prepare individuals to clean and care for buildings and operate maintenance equipment.

Number of Colleges Offering Training	10
2004 Follow-up respondents employed of continuing education	NA
2004 Follow-up respondents working full-time	NA
2004 Follow-up respondents working in related jobs	NA

Results of this Year's Program Review: Nine colleges submitted program review summary reports on their Custodian/Caretaker programs. Seven colleges reported plans to continue their programs with minor improvements, two colleges plan to discontinue their programs, and one college reported that the program was scheduled for further review.

Program Need: According to the Illinois Department of Employment Security, employment projections for Janitors and Cleaners predict higher than average growth in employment through 2012 at 14.16 percent. Programs report strong enrollment, due to the limited time for completion and opportunities for employment. However, the high enrollment of inmates in the programs limits follow-up employment information.

Program Cost: Generally, colleges that are offering the program in conjunction with a correctional facility report that it is cost-effective, due to the fact that Department of Corrections funds the program. Those colleges who are training a high concentration of developmentally disabled students report that the program is not cost-effective, due to the need for extensive personal attention.

Program Quality: Programs cited several strengths including preparing students for immediate employment in a short time period, hands-on opportunities for students to prepare for this profession, qualified instructors, and flexible enrollment. Common weaknesses included difficulty in planning programs for inmates for security reasons, decrease in funds, and difficulty in monitoring completers. Quality improvements implemented by the colleges include additional training equipment, improved curriculum, seeking additional resources, and developing a procedure to monitor program completers.

Parks, Recreation, and Leisure Facilities Management (CIP 31.0301)

Programs that prepare individuals to plan, develop, and manage park and recreation facilities, athletic training facilities, and other related recreational events or activities.

Number of Colleges Offering Training	9
2004 Follow-up respondents employed of continuing education	100%
2004 Follow-up respondents working full-time	72.7%
2004 Follow-up respondents working in related jobs	45.5%

Results of this Year's Program Review: Ten colleges submitted program review summary reports on their Parks, Recreation, and Leisure Facilities Management programs. Five colleges reported plans to continue their programs with minor improvements, four colleges plan to discontinue their programs, and one college reported that its program will be significantly modified.

Program Need: According to the Illinois Department of Employment Security, employment projections for Recreation Workers predict slightly higher than average growth in employment through 2012 at 12.59 percent. However, programs that specifically deal with Fitness Trainers show employment projections that are much higher than average at 38.35 percent, and this listed as a "Best Bet" occupation according to Illinois Occupational Outlook in Brief. Programs that are being discontinued cite low enrollments and lack of potential employment as their main decisions. The remainder of the programs cite steady to strongly increasing enrollments. The Fitness Trainer programs prepare their students to take national certification exams and/or transfer to a four-year sports management program.

Program Cost: Generally, colleges that are continuing to offer the program report that it is cost-effective.

Program Quality: Programs cited several strengths including preparing students for immediate employment in a short time period, hands-on opportunities for students to prepare for this profession, qualified instructors, and flexible enrollment. Common weaknesses included difficulty in planning programs for inmates for security reasons, decrease in funds, and difficulty in monitoring completers. Quality improvements implemented by the colleges include additional

training equipment, improved curriculum, seeking additional resources, and developing a procedure to monitor program completers.

Summary of Analyses of Career and Technical Education Program Reviews and Recommendations

During fiscal year 2005, the career and technical education programs reviewed by the colleges remain strong as evidenced by information related to program need, program cost-effectiveness, and program quality. Career and technical education program review summaries for this year provided strong evidence that the colleges are utilizing their resources as effectively as possible. Colleges consistently indicated that sharing faculty, instructional space, equipment and other resources as appropriate contributed to the quality and cost-effectiveness of their programs. Common strengths identified by many of the colleges in their career and technical areas included a highly knowledgeable and qualified faculty, connections to business and industry, and active and involved advisory committees. Common weaknesses were lack of adequate instructional space, and out-of-date equipment and/or technology. One challenge identified by several colleges, specifically those with training programs leading students towards a credentialing exam, was inability to track student credential attainment. Several colleges used the ICCB Performance Enhancement Grant to supplement student tracking of credential attainment through improving their data and record-keeping systems, as well as maintenance policies and procedures.

From this year's review summaries, it is easy to see how community college career and technical education programs are affected by their local labor market. In many instances, programs continue to thrive with only minor improvements based on changes in local need. In others, colleges are being faced with reorganizing or eliminating programs that were anticipated to thrive under typical labor market conditions. As the economy continues to stall, our community colleges continue to strive towards meeting their communities' interests and needs, as well as offering new and emerging educational opportunities to students.

Summary and Conclusions

This report highlights and summarizes accountability activities and initiatives described by Illinois' 48 community colleges in their Accountability/Program Review Reports for fiscal year 2005. The reports submitted by the colleges provide evidence of the ongoing review processes that are in place to ensure that high levels of quality and productivity are achieved for programs and services that best support each college's mission. Through program review, the colleges examine targeted program areas and services to assess their ability to meet their intended purpose in a cost-effective, high-quality manner.

The Illinois Community College Board *Fiscal Year 2005 Accountability and Productivity Report* provides analyses of program reviews in **199 academic disciplines**; **469 career and technical program areas**; **and 30 Adult Education and Family Literacy, English as a Second Language, and Developmental Education programs.** Highlights of the findings of the reports follow:

- Annual reporting of the results of program reviews is a major accountability effort by the colleges that began in 1983. The review is based on three criteria: program need, program cost, and program quality. Programs are reviewed at least once every five years.
- During fiscal year 2005, colleges reviewed a total of **199 academic disciplines**, **30 adult** and developmental education and English as a Second Language programs, and **469** career and technical programs.
- Findings of the reviews of academic disciplines indicated adequate need and costeffectiveness. Quality enhancements included expanding methods of assessment and continuing to use the results to improve instruction, applying technology to improve teaching and learning, adding ethics courses across the curriculum, and the use of portfolios to showcase student learning.
- Pevelopmental Education and Family Literacy, English as a Second Language, and Developmental Education programs indicated that strong need for the programs continues, with particular growth noted in the need for ESL programs. Most colleges indicated these programs are cost-effective due to the use of part-time instructors and staff and large enrollments. In cases where program costs exceeded the average, colleges still considered them to be cost-effective in relation to the needs of the populations served. Commonly noted program strengths included experienced and dedicated faculty and staff, flexible class schedules and formats, multiple instructional sites, and access to student support services. Commonly noted program concerns included the need for more full-time staff and the need for additional staff to provide more intensive follow-up services for students. A common focus for quality improvements was on providing support to transition students to college-level courses and track their success.
- As a result of reviews of career and technical programs, 392 programs were continued with minor improvements, 12 programs were significantly modified, 51 programs were identified for elimination, and 14 programs were scheduled for further review during the coming year.
- The most commonly identified strengths for career and technical programs were well-qualified faculty, active advisory committees, external accreditation (where applicable), industry and local partnerships, and placement of program completers. The most common weaknesses were low enrollments, low completions, the need to continually upgrade and/or replace curricula and equipment to keep pace with changing technologies, and the need to provide more flexible scheduling options.

Program review has been the major accountability tool by which community colleges demonstrate the quality and effectiveness of the programs and services they offer to students. However, the demand for institutional accountability for student learning outcomes has intensified at the state and national level, leading to the development of external systems to measure the performance and effectiveness of postsecondary programs and services. For example, the Department of Education, Office of Vocational and Adult Education, requires colleges to report annual progress toward meeting performance goals for career and technical programs, and the Illinois Board of Higher

Education has recently implemented a system of performance indicators as part of the annual *Performance Report* as well as a requirement that all academic programs systematically assess student learning and use the results to improve programs. Program review needs to be the mechanism that brings all of this information together for use in an evaluation of programs and services that leads to continuous improvement.

Status of Recommendations from 2004 Report: A recommendation in the report Accountability and Productivity in Illinois Community Colleges Fiscal Year 2003 stated that, "To ensure that the program review process continues to be a major accountability tool for Illinois community colleges, during fiscal year 2005 ICCB staff should convene a work group to examine the process and make recommendations to enhance the process to provide increased accountability and to reduce duplicative reporting." During the past fiscal year, ICCB staff along with the project consultant team (Drs. Kathleen Kelly, Ivan Lach, and Sharon Kristovich) coordinated a comprehensive review of the existing process, drafted preliminary recommendations, met with various stakeholders in program review to seek input on the draft report, and have since presented the Illinois Community College Board with final recommendations for revising the statewide program review process. These final recommendations were accepted by the Board on September 16, 2005. During the remainder of this fiscal year, the consultant team will produce a program review manual and host a series of regional training sessions for college staff. Finally, ICCB staff continues working with the consultant team to achieve revisions of the current process as outlined in the final recommendations, to identify pilot colleges and to ensure smooth transitioning into the new reporting system for the colleges.

Conclusion. The report of Accountability and Productivity in Illinois Community Colleges Fiscal Year 2005 provides evidence that Illinois' comprehensive community colleges play a vital role in the state's educational and workforce preparation. They provide access and opportunity to nearly one million diverse students annually, including those seeking assistance deciding on a new career or upgrading skills for their current occupation, persons interested in transferring to another college or university, and students who need to sharpen their basic skills. In addition, they are a valuable resource to businesses and industries and a partner in economic development in the districts they serve. The report also illustrates that the colleges are committed to continuous improvement of their programs and services. As enrollments increase and fiscal constraints continue, the colleges have implemented strategies to maintain their level of service to their districts. The content of the reports affirms that Illinois community colleges continue to play an essential role in preparing the well-educated, high-skilled citizenry the state must have to strengthen the economy and support a desirable living environment.

Appendix A

COMMUNITY COLLEGE PROGRAM REVIEW SUMMARY TABLES

Illinois Community College Board Table A-1 LIST OF PROGRAMS REVIEWED BY COMMUNITY COLLEGES DURING FISCAL YEAR 2005

DURING FISCAL YEAR 2005						
College	# of Occupational Curricula Reviewed	# of Academic Disciplines Reviewed	# of Dev/Adult Education Programs Reviewed			
Black Hawk	19	9	0			
Chicago						
Daley	12	0	1			
Kennedy-King	6	0	0			
Malcolm X	2	10	0			
Olive-Harvey	2	3	0			
Truman	1	3	0			
Washington	10	2	0			
Wright	4	11	0			
Danville	9	2	4			
DuPage	24	6	0			
Elgin	7	7	0			
Harper	16	4	1			
Heartland	4	10	0			
Highland	5	7	0			
IL Central	20	0	0			
Illinois Eastern						
Frontier	1	1	0			
Lincoln Trail	7	1	0			
Olney	3	9	0			
Wabash	7	1	0			
IL Valley	10	0	0			
Joliet	31	4	0			
Kankakee	3	0	0			
Kaskaskia	13	0	0			
Kishwaukee	16	6	0			
Lake County	13	7	0			

Illinois Community College Board Table A-1 LIST OF PROGRAMS REVIEWED BY COMMUNITY COLLEGES DURING FISCAL YEAR 2005

College	# of Occupational Curricula Reviewed	# of Academic Disciplines Reviewed	# of Dev/Adult Education Programs Reviewed
Lake Land	14	5	0
Lewis & Clark	7	3	2
Lincoln Land	8	10	4
Logan	5	2	0
McHenry	6	4	0
Moraine Valley	9	6	3
Morton	3	4	4
Oakton	25	9	0
Parkland	NA	NA	NA
Prairie State	3	5	3
Rend Lake	11	0	0
Richland	8	1	1
Rock Valley	24	6	3
Sandburg	13	1	0
Sauk Valley	3	2	0
Shawnee	3	2	0
South Suburban	18	3	1
Southeastern	15	3	0
Southwestern	12	8	0
Spoon River	3	6	0
Triton	13	11	2
Waubonsee	8	4	0
Wood	13	1	1
TOTALS	469	199	30

Illinois Community College Board Table A-2 SUMMARY OF FISCAL YEAR 2005 REVIEWS OF OCCUPATIONAL PROGRAMS BY COLLEGE

College	Number of Programs Reviewed	(1) Number Continued with Minor Improvements	(2) Number Significantly Modified	(3) Number Identified for Elimination	(4) Number Identified for Further Review
Black Hawk	19	16	2		1
Chicago					
Daley	12	6		6	
Kennedy-King	6	5		1	
Malcolm X	2	1	1		
Olive-Harvey	2	1	1		
Truman	1	1			
Washington	10		1	9	
Wright	4	4			
Danville	9	8		1	
DuPage	24	23		1	
Elgin	7	6		1	
Harper	16	12			4
Heartland	4	3		1	
Highland	5	4			1
Illinois Central	20	15	1	4	
Illinois Eastern					
Frontier	1	1			
Lincoln Trail	7	5			2
Olney	3	3			
Wabash Valley	7	7			
Illinois Valley	10	8		2	
Joliet	31	31			
Kankakee	3	3			
Kaskaskia	13	8		4	1
Kishwaukee	16	16			
Lake County	13	13			
Lake Land	14	14			
Lewis & Clark	7	6			1

Illinois Community College Board Table A-2 SUMMARY OF FISCAL YEAR 2005 REVIEWS OF OCCUPATIONAL PROGRAMS BY COLLEGE

	J	T TONAL FROOKAMS DIT	I		
College	Number of Programs Reviewed	(1) Number Continued with Minor Improvements	(2) Number Significantly Modified	(3) Number Identified for Elimination	(4) Number Identified for Further Review
Lincoln Land	8	7		1	
Logan	5	5			
McHenry	6	3	2		1
Moraine Valley	9	7	1		1
Morton	3	3			
Oakton	25	25			
Parkland	NA	NA	NA	NA	NA
Prairie State	3	3			
Rend Lake	11	11			
Richland	8	8			
Rock Valley	24	9		15	
Sandburg	13	12	1		
Sauk Valley	3	3			
Shawnee	3	3			
South Suburban	18	15	1	1	1
Southeastern	15	13		2	
Southwestern	12	11		1	
Spoon River	3	2	1		
Triton	13	12			1
Waubonsee	8	7		1	
Wood	13	13			
TOTALS	469	392	12	51	14

NA- Data Not Available

Illinois Community College Board Table A-3 OCCUPATIONAL PROGRAMS ELIMINATED THROUGH PROGRAM REVIEW IN FISCAL YEAR 2005

IN FISCAL YEAR 2005			
District/College	Program Title	CIP	
CCC - Richard J. Daley	Home Health Aide Certificate	51.1615	
	Nursing Asst. Advanced Certificate	51.1614	
	Nursing Asst. Basic Certificate	51.1614	
	Transportation AAS	08.0709	
	Transportation Advanced Certificate	08.0709	
	Transportation Basic Certificate	08.0709	
CCC -Kennedy-King	Recreational Leadership Certificate	31.0301	
CCC-Harold Washington	Merchandising and Marketing AAS	08.0706	
	Merchandising and Marketing Advanced Certificate	08.0706	
	Merchandising and Marketing Basic Certificate	08.0706	
	Ornamental Horticulture Advanced Certificate	01.0601	
	Recreational Leadership AAS	31.0301	
	Recreational Leadership Certificate	31.0301	
	Travel and Tourism AAS	08.1105	
	Travel and Tourism Advanced Certificate	08.1105	
	Travel and Tourism Basic Certificate	08.1105	
Danville Area Comm. Coll.	Wastewater Treatment Certificate	15.0506	
College of DuPage	International Marketing Certificate	08.0706	
Elgin Comm. College	Gerontology/Mental Health Certificate	20.0602	
Heartland Comm. College	Life & Health Insurance Certificate	08.1001	
IL. Central College	Periopertive Nursing Certificate	51.1612	
	Transportation and Traffic Management Certificate	08.0709	
	Wastewater Treatment Certificate	15.0506	
	Water Treatment Certificate	15.0506	
IL. Valley Comm. College	Agriculture AAS	01.0101	
	Agriculture Certificate	01.0101	
Kaskaskia College	Horticulture AAS	01.0601	
	Horticulture Certificate	01.0601	
	Horticulture Technician Certificate	01.0601	
	Horticulture Specialist Certificate	01.0601	

Illinois Community College Board Table A-3 OCCUPATIONAL PROGRAMS ELIMINATED THROUGH PROGRAM REVIEW IN FISCAL YEAR 2005

D (G. II	IN FISCAL TEAR 2005	
District/College	Program Title	CIP
Lincoln Land Comm. College	Landscape Horticulture AAS	01.0605
Lincoln Trail College	Air Conditioning Refrigeration Certificate	47.0201
	Architectural Drafting AAS	48.0102
	Architectural Drafting Certificate	48.0102
	Computer Aided Drafting Certificate	15.0810
	Industrial Engineering Drafting AAS	15.0805
	Industrial Engineering Drafting Certificate	15.0805
	Quality Improvement Specialist AAS	15.0702
	Quality Improvement Specialist Certificate	15.0702
	Sheet Metal Certificate	48.0506
Rock Valley College	Commercial Lending Certificate	08.0401
	Marketing Certificate	08.0705
	Mini-Certificate Water Activities	31.0301
	Officiating Certificate	31.0301
	Recreational Leadership AAS	31.0301
	Recreational Leadership Aide Certificate	31.0301
	Rec. Lead Aide Cert. Skills Certificate	31.0301
	Rec. Lead Cert. Professional Certificate	31.0301
	Savings and Loan Certificate	08.0401
	Savings and Loan Certificate of Achievement	08.0401
	Savings and Loan Certificate of Distinction	08.0401
	Savings and Loan Certificate (Financial Spec.)	08.0401
	Savings and Loan Certificate (General)	08.0401
	Savings and Loan Certificate (Mortgage Lending Spec.)	08.0401
	Savings and Loan Certificate (Savings Spec.)	08.0401
South Suburban College	General Subcontracting Building Technology Certificate	46.1000

Illinois Community College Board Table A-3 OCCUPATIONAL PROGRAMS ELIMINATED THROUGH PROGRAM REVIEW IN FISCAL YEAR 2005 District/College Program Title CIP Southeastern IL. College Commercial Custodial Maintenance Certificate 20.0604 Landscape Horticulture AAS 01.0605 08.0705 Southwestern IL. College Retailing AAS 08.0102 Waubonsee Comm. College Fashion Merchandising Certificate