

## DOCUMENT RESUME

ED 436 192

JC 000 007

TITLE Accountability and Productivity in the Illinois Community College System, Fiscal Year 1999.

INSTITUTION Illinois Community Coll. Board, Springfield.

PUB DATE 1999-11-00

NOTE 67p.

PUB TYPE Reports - Descriptive (141)

EDRS PRICE MF01/PC03 Plus Postage.

DESCRIPTORS \*Accountability; \*Community Colleges; \*Educational Assessment; Educational Quality; Institutional Mission; \*Productivity; Program Effectiveness; \*Program Evaluation; \*State Colleges; State Standards; Two Year Colleges

IDENTIFIERS \*Illinois Community College System

## ABSTRACT

This report summarizes accountability activities and initiatives submitted by Illinois' 48 community colleges in their Accountability/Program Review reports. The three primary sections of this report include Accountability Special Focus Areas, Analyses of the Results of Fiscal Year 1999 College Program Reviews, and State-Level Initiatives. Topics considered in the Accountability Special Focus section this year include College Priorities, Performance-Based Incentives--District-Based Goal, and Public Service Offerings. Programs in five academic disciplines, adult and developmental education and English as a Second Language, and 25 occupational/vocational program areas are examined in the Results of Fiscal Year 1999 College Program Reviews. The State-Level Initiatives section briefly highlights initiatives undertaken at the state level to promote accountability, quality and productivity. The report closes with recommendations: (1) the colleges should continue efforts to ensure that collection of noncredit student data can be fully reported to the board; (2) the colleges should explore strategies to accommodate the varying needs of students for credit and noncredit instruction, particularly in occupational areas that are dependent on constantly changing technology; and (3) the board should develop a process to simplify the review and approval of requests for new short-term certificates of less than 30 semester credit hours. Appended are Community College Program Review Summary Tables. (VWC)

REPORT

# ACCOUNTABILITY AND PRODUCTIVITY

## IN THE ILLINOIS COMMUNITY COLLEGE SYSTEM

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND  
DISSEMINATE THIS MATERIAL HAS  
BEEN GRANTED BY

V.K. McMillan

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)

1

Illinois Community College Board  
401 East Capitol Avenue  
Springfield, Illinois 62701-1711  
Voice: (217) 785-0123  
Fax: (217) 524-4981  
<http://www.iccb.state.il.us>

November 1999

ED 436 192

JC00007



# ACCOUNTABILITY AND PRODUCTIVITY IN THE ILLINOIS COMMUNITY COLLEGE SYSTEM FISCAL YEAR 1999

## TABLE OF CONTENTS

	<u>Page</u>
Introduction . . . . .	1
PQP Special Focus Issues for Fiscal Year 1999 . . . . .	2
College Priorities . . . . .	2
Performance-Based Incentives - District-Based Goal . . . . .	2
Public Service Offerings . . . . .	3
Analyses of Results of Fiscal Year 1999 Program Reviews . . . . .	9
Academic Program Review . . . . .	9
Adult and Developmental Education and English as a Second Language Review . . . . .	12
Occupational Program Review . . . . .	13
Funeral Services . . . . .	15
Quality Control Technician . . . . .	15
Mechanical Design Technology . . . . .	17
Computer-Assisted Design . . . . .	18
Home Furnishings and Equipment Installers & Consultants . . . . .	19
Library Assisting . . . . .	20
Plumber & Pipefitter . . . . .	21
Heating, Ventilation, Air Conditioning, and Refrigeration Mechanic . . . . .	22
Architectural Drawing . . . . .	24
Mechanical Drafting . . . . .	25
Typesetting, Make-up & Composition . . . . .	26
Lithography, Photography & Platemaking . . . . .	27
Desktop Publishing Equipment Operator . . . . .	28
Machine Tool Operation/Machine Shop . . . . .	29
Machine/Machine Technologist . . . . .	29
Sheet Metal Worker . . . . .	31
Tool and Die Maker/Technologies . . . . .	32
Welding, Brazing, and Soldering . . . . .	33
Design and Visual Communications . . . . .	34
Commercial Photography . . . . .	36
Medical Laboratory Technician . . . . .	37
Ophthalmic Medical Technologist . . . . .	38
Accounting Technician . . . . .	39
Banking and Financial Support Services . . . . .	41
Business Administration and Management . . . . .	42
Administrative Assistant/Secretarial Services . . . . .	44

TABLE OF CONTENTS  
(Continued)

	<u>Page</u>
State-Level Initiatives .....	47
Summary and Conclusions .....	53
<b>Appendix A - Community College Program Review Summary Tables</b>	
Table A-1: List of Programs Reviewed by Community Colleges During Fiscal Year 1999 .....	58
Table A-2: Summary of Fiscal Year 1999 Reviews of Occupational Programs by College .....	60
Table A-3: Occupational Programs Eliminated Through Program Review in Fiscal Year 1999 .....	62

## ACCOUNTABILITY AND PRODUCTIVITY IN ILLINOIS COMMUNITY COLLEGES FISCAL YEAR 1999

### Introduction

This report highlights and summarizes accountability activities and initiatives submitted by Illinois' 48 community colleges in their *Accountability/Program Review Reports*. Beginning with the fiscal year 1994 report, the Illinois Community College Board has combined its annual report on program review with responses to the Illinois Board of Higher Education's (IBHE) Priorities, Quality, and Productivity (PQP) initiative to emphasize that program review and PQP are parallel initiatives with the common goal of assuring that the programs and services offered by the colleges are high-quality, cost-effective, and support the mission and priorities of each institution. In February 1999, IBHE introduced *The Illinois Commitment: Partnerships, Opportunities, and Excellence*, a broad-based initiative that identifies six statewide goals for higher education in Illinois that include and go beyond the elements of PQP. Illinois colleges and universities were asked to respond to the Illinois Commitment in an annual Results Report that will replace the PQP Report. College responses are summarized in the first annual *Illinois Community College System Results Report*, which was issued as a separate document in September 1999.

The three primary sections of this report include **Accountability Special Focus Areas, Analyses of the Results of Fiscal Year 1999 College Program Reviews, and State-Level Initiatives**. Topics considered in the Accountability Special Focus section this year include College Priorities, Performance-Based Incentives – District-Based Goal, and Public Service Offerings. Programs in five academic disciplines, adult and developmental education and English as a Second Language, and 25 occupational/vocational program areas are examined in the Results of Fiscal Year 1999 College Program Reviews. The State-Level Initiatives section briefly highlights initiatives undertaken at the state level to promote accountability, quality, and productivity.

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. This report illustrates that the colleges are committed to the continuous improvement of their programs and services and that they have in place strategic planning processes to address future needs.

### Accountability Special Focus Issues for Fiscal Year 1999

Each year in addition to the regular Program Review/Accountability analyses focusing on instructional programs, colleges are asked to address some specific issues that have been identified during the state's review of the previous reports or as a result of state-level analyses and priorities. During fiscal year 1999, focus areas included **College Priorities, Performance-Based Incentives – District-Based Goal, and Public Service Offerings**. A discussion of these areas follows. In addition, colleges were asked to respond to the Illinois Board of Higher Education's new initiative — the Illinois Commitment. College responses are summarized in the first annual **Illinois Community College System Results Report**, which was issued as a separate document in September 1999.

**College Priorities.** Since fiscal year 1995, colleges have annually reported on their institutional priorities as part of the PQP/Program Review Report and have consistently identified priorities in the areas of **teaching/learning, student access and success, services, workforce preparation, diversity, community building, communication, leadership, resources, and technology**. The *Illinois Community College System Results Report for Fiscal Year 1999* provides solid evidence of how closely aligned the goals and priorities of the IBHE, ICCB, and the colleges have become. To summarize, colleges address the statewide goal of **economic growth through certificate and degree programs and adult education, service to business/industry and welfare clients, partnerships, continuing education and public service, economic development and community outreach, and resource support**. Regarding the statewide goal in the area of **teaching and learning**, the colleges carry out programs and initiatives in **teacher recruitment and preparation, teacher professional development, K-12 outreach, high school articulation, faculty development, and student support**. The third statewide goal — **affordability** — is addressed through **limited tuition and fee increases, participation in financial assistance programs and dissemination of information to students, and policies to decrease time-to-degree**. The colleges support the statewide goal of **Access and Diversity** through initiatives to **recruit and provide support services for targeted at-risk groups, provide programs and services through a variety of delivery modes and formats, and increase rates of student retention and completion**. Regarding the statewide goal of **high expectations and quality**, colleges ensure high-quality programs through **program review and assessment, use of quality indicators, revised policies for at-risk students, and extensive faculty professional development initiatives**. Finally, colleges address the statewide goal of **productivity and accountability** through **strategic planning and linkages; restructuring; internal reallocation of staff and other resources; use of technology; and curriculum revisions, consolidations, and eliminations**. The third section of this report on State-Level Initiatives provides information on a wide array of ICCB initiatives that support the statewide goals, as well as the colleges' activities in the goal areas.

**Performance-Based Incentives – District-Based Goal.** In May 1998, the Illinois Community College Board accepted the recommendations of an advisory committee to implement a performance-based funding pilot project in fiscal year 1999. The pilot model is a two-tier model that includes (1) measures that reflect statewide goals for community colleges and (2) district-specific measures that reflect autonomy, mission differentiation, and community needs. In response to colleges' concerns about data burdens, the district-based goal was incorporated into the

Accountability/Program Review report as a focus area and other reporting requirements for this report were reduced.

During fiscal year 1998, each college district identified (1) a goal area of workforce development, technology, or responsiveness to local needs; (2) a specific goal and a plan to indicate a process for achieving that goal; (3) a baseline that illustrates current status; and (4) benchmarks that indicate progress in achieving that goal. Ten college districts chose a goal in the area of responsiveness to local needs, 21 districts chose the area of technology, and eight districts and one college from Chicago City Colleges district chose the area of workforce. Panels of peer reviewers examined each district plan to assure its appropriateness and upon the panel's approval, performance-based funds were distributed to the colleges. During fiscal year 1999, the colleges began working toward their district-based goals. Colleges submitted a report on their activities toward achieving the district-based goal during fiscal year 1999 as a part of their annual Accountability/Program Review Report in August 1999. Peer Review Panels are currently evaluating the reports to determine college outcomes and progress toward the goals. Panel recommendations should be complete by the end of November 1999, after which the appropriate performance-based funds will be distributed. Detailed information on the results of the district-based goal reports will be presented to the ICCB in January 2000.

**Public Service Offerings.** Public service, or noncredit, activities represent an important facet of the community college mission and should be evaluated regularly with respect to quality, need, demand, and centrality to institutional mission. A public service course or activity is one that responds to individual and/or organizational needs that fall outside structured programs. As important as the public service function is to the community college mission, it has been difficult to capture information that adequately describes the scope of public service activity that colleges provide. Public service activities was selected as an area of focus for fiscal year 1999 primarily because it was the first year colleges were asked to report individual student/unit record data for students enrolled in noncredit, nonreimbursable courses. This data collection is an attempt to quantify the scope of such activities more concisely than has been done in the past. Colleges were asked to review the public service function and provide information to address six specific questions. Following is a summary of their responses.

1. **Colleges were asked to describe how the public service offerings of the college support its overall mission and institutional, regional, and statewide priorities and indicate any changes that are being made as a result of findings of the review.**

A common theme was evident in the college responses to this question. In general, college missions and priorities address a continuum of learning needs within the community. Nearly every college indicated that public service offerings are intended to promote lifelong learning in the college district. As Joliet Junior College put it, "Commitment to lifelong learning and service to the community is evidenced through ever-changing offerings for those not yet in elementary school to those in the graying years of their lives." It is clear from the colleges' reports that they feel a responsibility to address the lifelong learning needs of their communities, and they accomplish this largely through a broad range of public service offerings, including youth programs, career enhancement, personal development, and



personal interest, as well as adult education and literacy programs, job training, and other economic development activities.

Areas of particular emphasis for new or expanded public service programs appear to be at the ends of the spectrum — youth and senior citizens. For example, Elgin Community College has focused noncredit programming on the creation of new programs such as Life Styles and Kids School, After School to target the 50 year old and above market and the middle/high school market. The college feels that the addition of these programs will enable it to be a provider of educational products for the entire community. Kankakee Community College's Office of Corporate and Continuing Education develops programs designed for target markets that include seniors and youth. At Rock Valley College, two of the strongest and most popular Community Education programs are the Children's Program and the Institute for Learning in Retirement, which recently doubled its membership. Spoon River College has created learning opportunities for seniors through the Center for Lifelong Learning and for youth through Discovery Days.

Two colleges emphasized that another important function of public service offerings is the role they play as an entry point to credit programs. Kishwaukee College found that at least 33 percent of students whose first-time enrollment is in community education eventually enter the college to take credit courses. Parkland College calls public service programming "boundary work," because it provides the entry point for many learners who are unsure of their place in higher education.

Colleges reported a number of actions that resulted from their reviews of public service offerings in relation to overall institutional, regional, and statewide priorities. The College of Lake County has identified additional short-term training courses and is reorganizing its Division of Community Education and Economic Development to allow one dean to focus exclusively on adult and community education. Lake Land College eliminated some low enrollment courses and plans to increase the number of special interest workshops, an area where enrollments have been increasing. Kishwaukee College will expand services in the Small Business Center from 20 hours to 40 hours per week. In addition, the college has a goal to reduce the cancellation rate for community education classes. Prairie State College has added additional computer training and English as a Second Language (ESL) courses to adult education programs to accommodate a shift toward employment and training throughout a student's preparation. Rend Lake College found that the number of enrollments in noncredit activities decreased from the previous year. As a result, increasing the number of public service and noncredit activities offered at the college has become a priority in the strategic plan for the institution.

**2. Colleges were asked to identify public service activities that are not self-supporting and indicate the reason(s).**

Colleges drew a clear distinction between public service courses and public service activities in response to this question. In general, public service courses are designed to be self-supporting through required fees paid either by individuals or by a company (i.e., for customized training). In addition, ICCB grants contribute to the support of core activities



of business/industry centers, and colleges may secure other external grants to support these activities as well. Colleges reported that nearly all public service courses are self-supporting. In fact, some colleges have policies that require that these areas be self-supporting. For example, a model adopted at Elgin Community College in 1996 requires the major areas for noncredit to be not only self-supporting, but revenue generating. At Kankakee Community College's Office of Corporate and Continuing Education, if a program fails to be delivered on a minimum cost-recovery basis, it is either modified or eliminated. However, Highland Community College indicated that a critical calculation traditionally not included in determining self-support of public service courses is the cost of providing registration, billing, and infrastructure support. The college is in the process of determining this cost.

Colleges did cite instances where public service courses were not self-supporting. In general, the colleges indicated that the benefit of the courses outweighed the costs. Two training courses offered at Heartland Community College were not self-supporting, but the college felt they filled a need, built awareness of the college's education programs, and created goodwill among constituents. The College of Lake County offers "incubator" courses that test community interest and may become credit courses if interest is sufficient. Black Hawk College indicated that some public service courses are not self-supporting by design. Workshops and seminars considered worthwhile are sometimes offered at no cost to participants. Usually, these are offered with a community partner, and the college's cost is one of time, not money. Triton College has made a commitment to support services at its Nuevos Horizontes Center, since the Center connects noncredit students from an underserved population with credit course opportunities. Overall, colleges reported that departments that offer public service courses operate at or above cost recovery, even though some individual courses may not be self-supporting.

On the other hand, public service activities are generally not self-supporting. These activities include cultural events, use of the college facilities by community groups, and other community service activities that are offered to the citizens at little or no charge. Colleges underwrite these activities as a part of their commitment to reach out to and enrich the surrounding communities. Often, the college Foundation provides grant funds to support public service activities as well.

**3. Colleges were asked to describe any revisions, consolidations, or eliminations planned as a result of examining public service offerings for quality and redundancy.**

In the area of public service, review is an ongoing process, due to the self-supporting nature of most of the courses and their dependence on public demand. As indicated in the previous section, public service courses that are not self-supporting are often eliminated, since the college cannot afford to support them. The same is generally true for redundancy among courses. Many colleges reported that no redundancy exists in the public service area.

However, a few colleges did indicate some instances where they felt duplication of effort was justified. For example, Belleville Area College, Highland Community College, Kishwaukee College, and the College of Lake County all reported that similar courses were offered in multiple departments. The colleges determined that although the courses appeared similar,

they were designed for different audiences or target markets and levels of proficiency, and were not duplicative or overlapping. This appears to occur most often with computer courses.

College reports emphasized the need to avoid duplication of efforts externally with other community agencies, as well as internally. For example, Lake Land College indicated that it tries not to be in direct competition with community agencies such as the YMCA and area park districts in its public service offerings. Sauk Valley Community College reported that area school and park districts are expanding summer programming for children. As a result, College for Kids restricts its offerings to unique activities that are not offered elsewhere.

Colleges reported a number of quality improvement actions as a result of the review. To reduce duplication of effort, Belleville Area College will centralize leadership for public service initiatives at the district-wide level. Harry S Truman College is considering eliminating the Certified Nurse Assistant course due to enrollment declines, and Wilbur Wright College is reducing Allied Health activities while a market analysis is done to identify areas of need. Elgin Community College, William Rainey Harper College, and Waubensee Community College all restructured departments with responsibility for public service offerings to reduce redundancy of staff effort. Highland Community College is considering combining its Youth Servant Leadership Program with other leadership initiatives at the college. Moraine Valley Community College eliminated some healthcare and personal development courses, closed two off-campus sites, and eliminated redundant offerings in the computer training area.

**4. Related to the new data reporting for public service courses, colleges were asked to describe any difficulties encountered in collecting data for individual student enrollments in noncredit courses and the actions that will be taken to address related data collection issues.**

Colleges identified difficulties both in obtaining and processing data for individual student enrollments in noncredit courses. There appear to be two common difficulties in obtaining enrollment information for noncredit courses. First, many noncredit course enrollments are taken by telephone. Collecting complete enrollment information over the phone can lead to lengthy calls or to incomplete information. Belleville Area College has addressed the problem by developing a form that is given to each participant to complete when he/she arrives for the class. Similarly, at Kaskaskia College, phone registration is followed by a form mailed to the student with a postage-paid return envelope to collect needed data. If registration forms are not received by the first class meeting, the forms are distributed and collected then. In any event, additional staff time and other resources are required to capture complete enrollment information for noncredit classes.

For the most part, colleges did not view data collection for noncredit courses as a major problem. However, they did report that it is occasionally more difficult to collect certain demographic information for very short-term courses. In addition, many contracts with individual companies are for courses in which a large number of employees are involved. Typically, the company provides a list of names, but individual enrollment information is not collected.

A second and more widespread difficulty in collecting data for noncredit courses appears to be the reluctance of individuals to provide certain types of personal information, most commonly birth date and social security number. At least two colleges, Morton College and Spoon River College, indicated that requesting full enrollment information for noncredit courses has lowered customer satisfaction with the process. However, both Richland Community College and John Wood Community College reported that explaining the need for the data is very effective in overcoming individuals' reluctance to provide the information.

A number of colleges also indicated difficulties in processing enrollment information for noncredit courses once it is collected. Commonly, the colleges maintain separate registration systems for credit and noncredit enrollment information. The majority of colleges that reported difficulties in processing data for noncredit course enrollments also indicated that they plan to acquire new software and/or data systems that will make data collection a more integrated process.

5. **Colleges were asked to compare the scope of noncredit courses (which require individual student registration) with that of noncredit activities for which no registration is required.**

For most colleges, noncredit courses that require registration are typically longer in time, have specific objectives for learning, and involve an evaluation of student success and satisfaction. Noncredit activities that do not require registration are less formal and are specific to individuals who participate. The College of Lake County noted that the scope of noncredit activity is dependent on current interests of students and the community, while the scope of noncredit courses is more broad-based and more predictable in its scheduling.

Most colleges reported offering more noncredit courses than activities. However, due to the one-time, large audience nature of many noncredit activities (i.e., concerts or plays), they typically involve higher total participation than noncredit courses. For example, John A. Logan College reported that it annually serves in excess of 100,000 individuals through noncredit activities, and 5,000 through noncredit courses. At Oakton Community College in fiscal year 1999, 934 noncredit courses were conducted with 7,576 enrollments, compared to 74 activities with 18,323 participants. Two colleges reported the opposite relationship between noncredit courses and activities. The College of DuPage enrolls about 35,000 students each year in noncredit courses, compared with an estimated 10,000 participants in noncredit activities. At Waubensee Community College for fiscal year 1999, the number of students enrolled in noncredit courses was more than double the number who participated in noncredit activities. These differences may be attributable to differences in the way colleges define activities vs. courses, as well as differences among communities regarding availability of activities and services from other community sources.

6. **Colleges were asked to describe any trends or shifts from credit to noncredit courses, or from noncredit to credit courses, that have occurred over the past five years.**

Of the colleges that reported trends or shifts in the relationship between credit and noncredit courses over the last five years, 19 institutions reported a shift from credit to noncredit

courses. A key factor in this shift is increased demand from individuals and employers for specific, short-term training offered in a flexible format, particularly in the area of computer training. Kennedy-King College attributes the increased demand for short-term training to shifts in federal education funds, the increased cost of education, and welfare reform initiatives. Harry S Truman College, Wilbur Wright College, Highland Community College, Illinois Central College, Kankakee Community College, and Spoon River College indicated that noncredit computer courses provide the most suitable vehicle to respond quickly to emerging trends and adapt the curriculum and structure of training to the latest technology. A number of colleges indicated that requests for customized training are increasing. Kankakee Community College and John A. Logan College reported that employers are opting to have customized training rather than send employees to a semester-long course. The emphasis is on the employee being able to acquire a specific skill that can be immediately applied in the workplace.

Ten colleges reported an opposite shift — from noncredit to credit courses. Wilbur Wright College reported that enrollments in noncredit allied health courses have declined as more students seek credit programs at other institutions. There is also a divergence of opinion on whether students and employers prefer noncredit or credit courses in computer technology. Lincoln Trail College indicated that more nontraditional part-time students are enrolling for credit courses in computer topics because of the increasing complexity of the subject matter that requires more time to master. Illinois Valley Community College has received increased requests from business to offer courses for college credit, particularly in industrial and technical fields. Employers and employees have increasingly indicated to the college the desire for certification of skill levels achieved and training completed. Likewise, the College of Lake County has experienced a major shift from noncredit to credit courses as a result of a growing need for accountability for workforce development programs, particularly in business and industry training and welfare to work. Richland Community College reported that business and industry program initiatives are requiring more contact hours, making a shift to credit courses feasible in many cases. John Wood Community College noted that some noncredit courses have shifted to credit to enable students to receive financial assistance.

There does appear to be a promising middle ground between the forces that mitigate for increasing noncredit courses and those that favor increasing credit courses. Both Kankakee Community College and Joliet Junior College reported that, although there is an increased demand for noncredit computer courses, once introductory knowledge has been gained many individuals seek credit classes to expand their skills. Even more promising, several colleges also reported that rather than shifting to credit or noncredit, the two areas have worked together to develop a combined product that provides the user a choice of credit or noncredit. The resulting classes are co-listed as credit and noncredit. The student elects which to pursue. For example, at Kaskaskia College, computer training courses are broken into modules. Credit students take the entire set of modules, while at the same time, noncredit students may take one or more modules of their choosing. Moraine Valley Community College has adopted an integrated management model that allows co-production of curriculum in Internet, Microsoft Engineer, and CISCO areas. Oakton Community College co-lists courses for credit and noncredit in fields such as real estate, financial services, health

information technology, and construction management. In fiscal year 1999, there were over 400 noncredit enrollments in co-listed courses at the college.

**Based on the results of the review of public service offerings and the importance of this functional area of the community colleges, it is recommended that:**

- 1. Colleges should continue efforts to insure that collection of data for students enrolled in noncredit courses can be fully captured and reported to the ICCB in order to more fully document the scope of the colleges' service to the citizens of Illinois.**
- 2. Colleges should explore strategies, such as co-listed courses and others, to accommodate the varying needs of students for credit and noncredit instruction, particularly in occupational areas that are dependent on constantly changing technology (i.e., computers, manufacturing technologies).**

### **Analyses of the Results of Fiscal Year 1999 College Program Reviews**

Program accountability in the community college system began in 1983 with a process called Program Review. Sixteen years later, the process continues to be a major accountability effort by institutions. Initially, community college programs are proposed in response to student or employer needs. To keep programs viable in meeting these needs, colleges conduct a review of programs at least once every five years. The review is based on three criteria: program need, program cost, and program quality. This report highlights the results of occupational, academic, and adult education and developmental and English as a Second Language programs that were reviewed during fiscal year 1999. It shows the challenges institutions face in keeping instruction relevant while maintaining cost-efficiency, and the numerous innovations that have been implemented to enhance program quality.

**Academic Program Review:** Colleges review academic programs at least once within a five-year cycle; however, each college determines when such reviews occur. Every reporting year, an array of innovations and program improvements are described. In their fiscal year 1999 reports, colleges noted expanded use of technology, including an ever-increasing number of courses offered via distance learning and using the Internet for research, as a means of offering courses, and as a way for students to communicate with faculty. Colleges also modified coursework to include an international focus and explored allowable course options under the Illinois Articulation Initiative (IAI).

**Program Need.** Academic coursework is the foundation of 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.

**Program Cost.** Program Review reports provided evidence that costs are generally in line with state averages. Variances arise in cases where faculty are new or long-tenured, part-time or full-time; the extent of technology needed to provide up-to-date instruction; class size; and so on.



***Program Quality in Communications:*** Courses in English composition and speech are the cornerstone for the transfer curricula. But, as reports show, articulated courses in both English and speech are becoming integrated into occupational curricula as well. Parkland College reports that its English 101 course is a required class for most certificates and all occupational (Associate in Applied Science) degrees and Prairie State College indicates that by the year 2001, speech will be a required course in all its A.A.S. programs. The English Department at Elgin Community College is implementing Academic System's Interactive English, a state-of-the-art interactive multimedia learning environment on CD Rom that provides a virtual coach, virtual peer assistance, and a virtual writing circle. The program will maximize the instructor's opportunity to work individually with students at their own pace. The college implemented a speech summer camp for high school students to improve competitive skills and prepare them for the coming tournament season. McHenry County College provided a perspective on the importance of its communications department in providing a cultural stimulus for the community: offering poetry readings, plays, lectures, and programs to further "an appreciation of the written and spoken word." McHenry faculty attended a workshop given by Lion Gardiner on academic goals and objectives. Following this, they revised course objectives, reviewed textbook selection procedures, grading, course requirements, and application of SCAN skills. Results included selection of one common handbook for all composition classes and revised guidelines for teaching composition. In addition, a service learning component was added to its composition course.

A noteworthy item regarding English as a Second Language (ESL) was included in Parkland College's program review report. The IAI Communications panel has approved ESL 101 and 102 as fulfilling the statewide general education writing requirement. The college has revised ESL learning objectives so they mirror English 101 and 102 course objectives while keeping the unique aspects of ESL instruction.

***Program Quality in Humanities:*** Nearly every institution that reviewed this area mentioned an intent to increase the emphasis on computer-assisted instruction and access for students. Two colleges plan to seek approval for Associate in Fine Arts degree options. Malcolm X College will offer a wider range of courses, increase social and cultural awareness, continue to support students' writing skills through a writing clinic, and review related library holdings. In the discipline of philosophy, William Rainey Harper College will introduce environmental, ethical and non-Western philosophy components into its transfer curricula and explore the use of e-mail and Internet opportunities for instruction. Prairie State College faculty created an assessment instrument to evaluate student essays for cognitive and cultural learning across the humanities disciplines that was implemented in fall 1998. The project is multi-disciplinary to include humanities and performing arts. The college sponsored a jazz festival for 14 high school and junior high bands that included two days of master classes and workshops by these jazz musicians.

***Program Quality in Foreign Language:*** Harry S Truman College recently added a computer lab dedicated to foreign language instruction. While some institutions reported enrollment declines, both Truman and Belleville Area College reported that enrollments have increased. Lincoln Land Community College (LLCC) reports good retention in its foreign language classes. LLCC faculty will visit high schools to support the teaching of foreign language, teach an on-line course in French, and work with the capitol scholars program. Programs originating from France are received via satellite in the classroom and used to supplement instruction, to enable students to immerse

themselves in the culture, and to experience rapidly spoken French. French movies on disk that are subtitled in French also give students practice in hearing and reading. Computer programs allow students to visit Paris and see a virtual reality France while participating in social interactions in France. A foreign language faculty member from Lincoln Land was nominated for the Pearson Master Teacher Award.

***Program Quality in Physical and Life Science:*** The relationship of physical and life sciences to both transfer and occupational curricula make it an indispensable part of general education offerings. Richland Community College reports good coordination between its health science faculty and general education life science faculty. Faculty are requesting technological improvements, such as Elmos, computers, and computer upgrades with Internet capabilities, and conversion of the lab into a tech-enhanced classroom, as a result of their program review. Oakton Community College reports that one of its full-time faculty members is an advisor for the educational telecourse, "Universe: The Infinite Frontier", a series of videotapes and a study guide dealing with descriptive astronomy that is used by over 100 colleges around the country. Richard J. Daley College added a natural science internship component to its offerings, in conjunction with the U.S. Department of Energy and the Argonne National Laboratory. This summer, nine students were selected for full-time paid summer internships, which included an opportunity to return next summer along with other new students. Oakton Community College's science department conducted a community outreach program by sponsoring an annual Futures Unlimited Conference for 8<sup>th</sup> grade girls, providing summer workshops for high school students to explore healthcare careers, and furnishing expertise at science fairs.

***Program Quality in Social and Behavioral Science:*** At the College of Lake County (CLC), a joint agreement was developed with the anthropology department, the college, and the government of Belize to be the primary group excavating the site known as the Mayflower Project, an unusual opportunity for a community college. CLC students have worked on this site each summer since 1996 and continued association with this project has been assured despite a reduction in the number of foreign universities approved to work on archaeological sites in this country. Joliet Junior College reports that its instructional approach in anthropology reflects a recognition of different student learning styles and an awareness of multiple intelligences theory. Observation of student anecdotes and behavior points to reduction of student biases and improved listening skills. One experiential exercise that has been reasonably effective in addressing bias and subtle discrimination is the creation of a Utopian Society/Organization. In the discipline of geography, Illinois Central College added a human geography course, revised courses, purchased telecourses and air photo interpretation equipment for economic geography, integrated Geographic Information Systems (GIS) technology; created a web page, and integrated Internet-based activities into courses.

***Program Quality in Math:*** At Kennedy-King College, matriculation of students from remedial courses through transferable courses will be improved. The college plans to test students in pre-credit math at shorter intervals (four weeks rather than eight weeks) to evaluate their readiness to move to the next level of developmental instruction. Start dates for developmental courses will be slated to coincide with the shorter pre-credit testing intervals. Kennedy-King will implement course standardization as part of the articulation agreements with several local universities and the matching of local public school math exit competencies with college-level course entrance competencies, which is part of the college's commitment to K-16 reform. Lewis and Clark Community College has increased usage of graphing calculators, experimentation with QUICKSTAT (statistical software



developed by Lewis & Clark math faculty) and spreadsheet software, instruction in the use of Derive and MPP software in calculus courses, and distance-based learning of college algebra. Innovations in teaching methods include activity-oriented, discovery-based, data-based, and cooperative learning. An area was reassigned as a math lounge to give students a common area in which to study and discuss displayed puzzles and articles of mathematical interest. Spoon River College plans to conduct a focused review of developmental math and increase the number of joint meetings of full- and part-time faculty. As part of its review, syllabi were updated and revised, and content of courses was considered in relation to course content in similar courses at senior institutions and the IAI guidelines for general education and the Associate in Arts and Associate in Science degrees. Several concerns were discussed regarding developmental mathematics courses, including course objectives, scheduling formats, content, and competencies to be achieved before students progress to the next level. Rock Valley College noted a growing interest in dual credit offerings in district high schools. The college added a self-paced section of developmental math to "fast track" completion of material by students with good but rusty math skills.

**Adult and Developmental Education and English as a Second Language Review.** Colleges are required to review their adult education and developmental education programs at least once every five years. The scheduling of these reviews is at their discretion. This year 38 related programs were examined.

**Program Need.** Adult Basic Education (ABE) and Adult Secondary Education (ASE) 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 literacy instruction and education for students wishing to acquire a high school diploma or general equivalency diploma (GED). Family literacy programs are also included. Students can take related instruction through programs offered by other educational agencies or community-based organizations, but the bulk of students are served by community colleges. English as a Second Language (ESL) instruction provides reading, writing, and computation instruction for non-native English speakers seeking English language skills. For the past two years, ESL enrollment surpassed enrollment in ABE and ASE programs according to the publication, *Data and Characteristics of the Illinois Community College System*. Developmental programs serve students whose skills in math, English, or reading are not up to college level. According to the report, *Remedial/Developmental Education in the Illinois Community College System* (ICCB, March 1998), community college students accounted for 88 percent of the students who enrolled in remedial coursework at a public institution of higher education during fiscal year 1996. The current and expected level of activity in these program areas challenges colleges to provide instruction that is both innovative and cost-efficient.

**Program Cost.** Colleges frequently utilize part-time faculty to meet the needs of a diverse population of students in terms of geography, type of instruction, and nontraditional scheduling. Institutions view these programs as necessary since they address the needs of student populations that desperately need the education and services provided in order to be productive members of society. John Wood Community College's service to students on public assistance resulted in an estimated annual savings to the state of \$246,488 as former welfare recipients are now earning wages and paying taxes. A growing ESL population requires institutions to stretch dollars to meet increasing instructional costs. Colleges see programs in adult education and English as a Second

Language as programs that must be closely linked to occupational and transfer curricula, which also justifies investment in these programs.

***Program Quality of Developmental Programs.*** A critical determiner of the effectiveness of developmental instruction is how well students perform in subsequent classes. In their program review reports, Rock Valley College and Rend Lake College documented high success rates for students matriculating from developmental coursework into college credit courses. Rend Lake integrated Internet and e-mail into its reading curriculum, and developmental faculty plan to meet with department chairs to determine which courses should list reading proficiency as a prerequisite. Parkland College reports that faculty have developed Learning Communities and theme-based courses to enhance developmental English instruction. A study conducted at Parkland found that students in preparatory writing courses may gain an improved ability to organize and develop essays, but experience less success in improving grammar and punctuation skills. Both Highland Community College and Parkland College have added grammar instruction to course offerings. Harold Washington College will form an advisory committee to provide better coordination between college-level English faculty, ESL faculty, and developmental faculty. Lewis and Clark Community College has integrated the use of Texas Instruments graphing calculators, alone and in conjunction with Calc-Based Laboratory (CBL), Calculator-Based Ranger (CBR) and Graph-Link software. The college has adopted the Kaseberg textbooks for elementary and intermediate algebra, and faculty are working to adapt the "just-in-time" approach of these texts with their own instructional approach.

Elgin Community College hired a placement and retention coordinator and revised its course schedule from one open-entry/open-exit 16 week session to two eight-week cohort-based sessions each semester. The college offers a fast-track GED course. Students who complete the GED program successfully are given a free credit course.

***Program Quality of English as a Second Language Programs.*** Highland Community College noted an increased demand for Advanced ESL classes and is delivering more and more support services such as transportation and child care to enable students to persist toward their goals. Elgin Community College reports that its district includes the second fastest growing non-native speaking population in the state. Students who complete the advanced-level ESL course are given a free credit course. At Elgin, family literacy programs scheduled to be implemented in fiscal year 1999 will provide ESL instruction for non-native parents and their children. A recognition dinner was reinstated for graduating participants, and a dedicated computer classroom/laboratory was implemented for intermediate and upper-level ESL classes that use course text and supplemental materials. An essay contest was initiated for lower-level ESL classes to promote writing skills, and winners were recognized at the ESL certificate ceremony at the end of the term. Parkland College boasts a success rate of nearly 100 percent in learning outcomes by level in its Intensive English program/ESL. The College of DuPage plans to implement a full-time Intensive English Language Institute for native-born linguistic minority and international students, plus a mentoring program for ESL teachers

**Occupational Program Review.** Each year, community colleges review specific occupational programs and submit their findings to the ICCB. Within a five-year time span, all occupational programs are reviewed.

Based on their examination of program review outcomes, colleges can choose to (1) make minor changes to otherwise healthy programs, (2) significantly modify curricula to better address student or employer needs, (3) discontinue programs that are no longer viable, or (4) schedule programs for a subsequent review to address particular concerns such as low enrollments or high costs. Based on program reviews conducted during fiscal year 1999, 591 occupational programs received minor improvements, 19 programs were significantly modified, 32 programs were scheduled for further review during fiscal year 2000, and 50 programs were identified for elimination. A breakdown of information by college appears in Appendix Table 2, and a list of curricula which colleges have decided to eliminate is displayed in Appendix Table 3.

Based on the results of the *1998 Follow-Up Study of Occupational Graduates*, colleges were asked to respond to the following recommendations from the report, if appropriate, within their program review summaries:

- Results of the 1998 follow-up study indicated that approximately one-third of the full-time employed Accounting Technician and Heating, Air Conditioning, and Refrigeration Mechanics and Repairer graduates were working in an unrelated field because they could not find a job in their field of training. In addition, over 40 percent of Welder/Welding Technologist graduates indicated they preferred to work in another field. **Community colleges that offer programs in these fields should determine if actions need to be taken to improve the program, whether through curriculum content or job information services.**
- On average, 12 percent of all employed graduates who responded to the 1998 follow-up survey were working in part-time positions. Six program areas had part-time workers in excess of this percentage: Home Furnishings and Equipment Installer, Library Assistant, Desktop Publishing Equipment Operator, Design and Visual Communications, Commercial Photography, and Accounting Technician. **Colleges that offer programs in these fields should continually examine their local labor markets, and broader labor markets if appropriate, to determine the ratio of part-time to full-time positions available in these occupations and counsel students about the availability of full-time employment.**

Finally, since some of the data from the occupational follow-up study is used to indicate performance on one of the statewide goals in the Performance-Based Incentive System, minimum response rates have been set: a 50 percent response rate must be achieved by those colleges surveying 30 or more graduates, a 60 percent rate is required for those institutions contacting less than 30 graduates. **It was recommended that colleges that did not meet the appropriate criterion for the survey of fiscal year 1997 occupational graduates should give special attention to increasing these rates for the coming year.** An initial examination of the results of the 1998 follow-up survey indicates that nearly all the colleges that did not meet the minimum criteria for response rates for the 1998 follow-up survey were able to meet the criteria for the 1999 survey, a direct reflection of the increased importance of these data for accountability purposes.

Summaries of the occupational program reviews conducted during fiscal year 1999 follow.

**Funeral Services**

<b>Number of colleges offering training</b>	<b>2</b>
<b>Program cost</b>	<b>Average</b>
<b>Job outlook</b>	<b>Balance</b>
<b>Percent of 1997 follow-up respondents employed or continuing education</b>	<b>93 percent</b>
<b>Percent of 1997 employed follow-up respondents working full-time</b>	<b>100 percent</b>
<b>Percent of 1997 employed follow-up respondents working in related jobs</b>	<b>85 percent</b>

As a result of program review in the area of Funeral Services, both programs were continued with minor improvements

**Program Need.** According to *Horizons (1999)*, slower than average growth in this occupation is expected in both the nation and in Illinois through 2006. Population growth and increasing public interest in advanced funeral planning should contribute to expanded demand for funeral services. Opportunities for graduates of accredited training programs should be good. Malcolm X College and Carl Sandburg College are the only two community colleges that offer programs in this field. Combined enrollments have increased from 105 in fiscal year 1996 to 117 in fiscal year 1998, while completions have more than doubled during the same period from 15 in fiscal year 1996 to 37 in fiscal year 1998. Both colleges reported adequate student and employer demand for the programs.

**Program Costs:** Compared to statewide costs for all occupational programs, the costs for Funeral Services are average. Both colleges indicated that the programs are cost-effective to operate.

**Program Quality.** Malcolm X College cited involvement and support from the program advisory committee as a strength. The program review identified the need to be able to offer an authentic assessment for the program through the availability of a mock funeral home setting. The college has recommended that the possibility of improving instructional equipment and space be discussed. In addition, a course to prepare students for the State examination for licensure will be added. Carl Sandburg College has implemented an accelerated program of study that allows students to utilize previously-attained general education courses and attend only mortuary science classes, thus enabling them to complete the program in two rather than four semesters. The college also enjoys excellent support from the Illinois Funeral Directors Association and its members for the practicum portion of the program.

**Quality Control Technician**

<b>Number of colleges offering training</b>	<b>13</b>
<b>Program cost</b>	<b>High</b>
<b>Job outlook</b>	<b>Balance</b>
<b>Percent of 1997 follow-up respondents employed or continuing education</b>	<b>100 percent</b>
<b>Percent of employed 1997 follow-up respondents working full-time</b>	<b>94 percent</b>
<b>Percent of employed 1997 follow-up respondents working in related jobs</b>	<b>80 percent</b>

As a result of program review during fiscal year 1999, thirteen Quality Control programs were continued with minor improvements, three programs were discontinued, and one program was scheduled for further review during fiscal year 2000.

**Program Need.** According to *Horizons (1999)*, slower than average employment growth is projected for quality control inspectors in both the state and the nation through 2006. The outlook varies by industry, and growth in the manufacturing industry will be a major factor. Companies often train existing employees for entry-level quality control positions. Further education is most important in this occupation as a tool for advancement beyond the entry level. Statewide this is a small program, with enrollments that declined from 317 in fiscal year 1996 to 278 in fiscal year 1999, a decrease of nearly 13 percent. Completions remained constant during the same period, and are low in comparison to enrollments. While the majority of colleges that reviewed programs in this area indicated that there is sufficient market demand, they acknowledged that enrollments are low. The College of Lake County began its program in 1994, but has concluded that it is not structured to meet industry needs, since it does not result in students meeting requirements to be Certified Quality Technicians. The program is being withdrawn. At Richland Community College, the program began in 1975 and has not kept pace with changes over time in the skills required for this occupation. The college recognizes the need for major curricular revisions. The program at Triton College has been under review for two years and is undergoing significant revisions to combine it with a similar program in Business and Technology.

**Program Cost.** Statewide, Quality Control is characterized as a high cost program, meaning costs for this program area are 50 percent or more higher than the average cost for all occupational programs. However, all of the colleges indicated that the program is cost-efficient, since it is closely related to and often shares courses, facilities, etc., with other manufacturing programs. Moraine Valley Community College costs appear high, but the College noted that the program is unique – the only Non-Destructive Evaluation program in the eastern U.S. – and cannot be directly compared to other quality control programs.

**Program Quality.** The most frequently-mentioned factors that contribute to program quality were excellent faculty, strong advisory committees, and well-equipped facilities. In addition, Waubensee Community College noted that both the certificate and degree programs are designed to prepare students to achieve national certifications for quality control. Frontier Community College, Kishwaukee College, and Sauk Valley Community College all indicated difficulty in maintaining course sequencing due to low enrollments of predominantly part-time students. Also related to low enrollment, colleges indicated a need for increased marketing efforts in this program area. In terms of program improvements, Frontier Community College plans to utilize the area chapter of the American Society for Quality to locate potential instructors. Moraine Valley Community College will develop an Internet version of the introductory course. The college has also completely revised the degree program to bring it into compliance with ISO standards, and indications are that at least one Chicago area company will accept most, if not all, graduates.



### Mechanical Design Technology

<b>Number of colleges offering training</b>	<b>15</b>
<b>Program cost</b>	<b>High</b>
<b>Job outlook</b>	<b>Balance</b>
<b>Percent of 1997 follow-up respondents employed or continuing education</b>	<b>98 percent</b>
<b>Percent of 1997 employed follow-up respondents working full-time</b>	<b>100 percent</b>
<b>Percent of 1997 employed follow-up respondents working in related job</b>	<b>79 percent</b>

Mechanical Design Technology programs are closely related to Computer-Assisted Design programs. At some colleges, due to departmental organization and the degree of sharing of faculty, facilities, and/or curriculum that occurs between the two programs, program review results are combined and reported in the CAD program area. Thus, only eight of the 15 colleges that offer instruction in this area reported program review information. As a result of program review, 12 programs in Mechanical Design Technology were continued with minor improvements, one program was discontinued, and three programs were scheduled for further review during fiscal year 2000.

**Program Need.** Nationally and in Illinois, employment for engineering technicians (which include this program category) is expected to increase about as fast as the average for all occupations through 2006. Technicians with a mechanical engineering expertise are expected to remain in demand as companies look to improve machinery, machine tools, and processes. Opportunities will be best for individuals who have completed a two-year program in engineering technology. Statewide, between fiscal years 1996 and 1999 enrollments in this program area remained constant, while completions increased 20 percent, but remained low in comparison to enrollments. All but one of the colleges that reported program review results in this area indicated that enrollments are stable or increasing, and that employment opportunities in the district far exceed the number of graduates. In fact, colleges consistently indicated that students often accept employment prior to completing the program, which keeps completion rates low. In addition, Moraine Valley Community College indicated that many students transfer to related baccalaureate programs after just one year of study.

**Program Cost.** In comparison to all occupational programs statewide, programs in mechanical design technology are high in cost, primarily due to the cost of acquiring and continually upgrading equipment and software to mirror industry standards. In addition, the College of Lake County and Illinois Central College indicated that program costs were high due to full-time faculty salaries. However, all the colleges indicated that the program was achieving its goals and operating in a cost-effective manner.

**Program Quality.** Factors cited most frequently in support of program quality include quality faculty, facilities and equipment, and the programs' favorable reputation in the community. The College of Lake County and Oakton Community College also noted that graduates earn higher-than-average salaries. Oakton noted that coursetakers earn on average more than program graduates, probably because coursetakers are often already employed in the field and just upgrading skills, while graduates are preparing for entry-level positions. As with other programs that rely on rapidly changing technologies, colleges identified the need to continually upgrade software and equipment as a challenge in offering mechanical design technology programs, as well as providing adequate

laboratory space. Moraine Valley Community College and Carl Sandburg College also noted a need to increase and improve efforts to market the program.

Many program enhancements were identified and/or implemented as a result of the program review during fiscal year 1999. For example, Illinois Central College will seek accreditation for its program. Students have also used a team approach to produce some interesting projects, such as designing and building a full-size electric car. Moraine Valley Community College plans to modify its certificate into smaller components. In addition, the College has developed Internet/Intranet course materials and uses the Internet for problem-solving assignments.

### Computer-Assisted Design

<b>Number of colleges offering training</b>	<b>33</b>
<b>Program cost</b>	<b>Moderately High</b>
<b>Job outlook</b>	<b>Slight Surplus</b>
<b>Percent of 1997 follow-up respondents employed or continuing education</b>	<b>94 percent</b>
<b>Percent of 1997 employed follow-up respondents working full-time</b>	<b>89 percent</b>
<b>Percent of 1997 employed follow-up respondents working in related job</b>	<b>67 percent</b>

As a result of program review during fiscal year 1999, 60 programs in computer assisted design were continued with minor improvements, one program was discontinued, and two programs were scheduled for further review during fiscal year 2000.

**Program Need.** According to *Horizons (1999)* slower than average employment growth is expected nationally for drafters through the year 2006. In Illinois, a decline is expected in employment of drafters. Widespread use of computer-aided design techniques may reduce the need for drafters. Opportunities will be best for those trained in the use of computer-aided drafting systems and electronic drafting equipment. All but three of the colleges that reviewed programs in this area reported steady or increasing enrollments. Statewide, enrollments increased 7.6 percent between fiscal years 1996 and 1998, while completions remained constant. Danville Area Community College attributed the continuing need for this program to business and industries of all sizes converting their product design, production, and maintenance planning activities from reliance on traditional board drafting to CAD. This requires designers who are knowledgeable about the processes utilized in production and are familiar with CAD to a much greater level than previously required. According to many college reports, completion rates have not increased to keep pace with enrollment increases for two reasons. First, many students are currently employed in the field and taking classes to acquire skills in CAD, and second, jobs are plentiful in this field, and students often accept employment prior to completing their entire program. Opportunities for individuals with skills in CAD exist in numerous fields, including civil engineering, architecture, mechanical engineering, furniture design, automotive design, transportation, interior design, landscape architecture, animation, and many others. Kaskaskia College was the only college to report low demand for drafters in the district, but the college expects that job opportunities will arise as drafters retire or leave the labor force.

**Program Cost.** In comparison to all occupational programs, CAD program costs are moderately high. This is mainly due to the dynamics of the field that make it imperative that software and



equipment be upgraded often to keep pace with new technologies that are used in the workplace. Colleges with program costs that were above the statewide average for this field most frequently cited the need to upgrade equipment and software, and relatively high salaries for full-time faculty as reasons. All of the colleges reported that the programs were found to be operating as cost-effectively as possible. Kishwaukee College noted that state-of-the-art computers are used for the program and later cascaded down to other programs that need less powerful computers in order to offset the costs somewhat.

**Program Quality.** Factors most frequently cited by colleges to support program quality include excellent faculty with relevant experience in the profession, strong partnerships with area business and industry, strong advisory committees, and state-of-the-art equipment and/or facilities. In addition, Illinois Valley Community College, Morton College, and South Suburban College all pointed to good articulation with secondary schools as a program strength. Several colleges also indicated that limited laboratory space or availability restricted the program and that 3-D modeling software should be incorporated into the program. Other quality improvements frequently recommended included updating laboratory facilities to bring all workstations to the same level of technology, and increased marketing and recruitment efforts, particularly targeted to high school students.

A wide array of program enhancements were planned or implemented as a result of program review. For example, Kishwaukee College will implement group advisement of freshmen in introductory courses to discuss the importance of completing the degree as a means to a better future, create a study team to discuss the mathematics requirement for the degree, and incorporate skills standards when available. South Suburban College has recommended that the CAD program and the Machine Tool program should evolve into a manufacturing technology program following the ICCB/IAI model. At Danville Area Community College, the networking of CAD computers to the Internet has allowed students to gain access to instructional materials available over the World Wide Web. In addition, some student projects have been initiated with local businesses that allow "deliverables" to be sent to clients via electronic means. Kaskaskia College offers the program at a correctional facility. To fulfill the needs for internships, projects are obtained from various departments of the facility, coworkers, and the community. Students must work with the client to establish the project's drafting requirements, meet timelines for completion, make required corrections, complete documentation, and maintain a professional attitude, thus reinforcing a positive work ethic. Lewis & Clark Community College offers a Teaching Aide Internship that allows students to go to area high schools to assist high school CAD/drafting teachers with classroom instruction. The internship helps high school instructors keep up with the latest in CAD software, while giving students an opportunity to learn about the field of education as a possible career.

### **Home Furnishings and Equipment Installers & Consultants**

<b>Number of colleges offering training</b>	<b>7</b>
<b>Program cost</b>	<b>Moderately High</b>
<b>Job outlook</b>	<b>Average Growth</b>
<b>Percent of 1997 follow-up respondents employed or continuing education</b>	<b>85 percent</b>
<b>Percent of 1997 employed follow-up respondents working full-time</b>	<b>87 percent</b>
<b>Percent of 1997 employed follow-up respondents working in related job</b>	<b>87 percent</b>

As a result of program review during fiscal year 1999, seven programs in home furnishings and equipment will be continued with minor improvements and three will be significantly modified.

**Program need.** *Horizons (1999)* reports near average growth in employment; however, this will be dependent on several factors including stable economic conditions, the amount of housing construction, and increased awareness of design or decorating services. Competition is expected to be keen. Statewide, enrollment increased from 662 in fiscal year 1996 to 706 in fiscal year 1998, or nearly seven percent, while completions remained constant and low in comparison to enrollments.

**Program Cost.** Costs for this program area are in the moderately high range, meaning that costs are from 20-30 percent greater than the average cost for all occupational programs. William Rainey Harper College will explore strategies for enrollment development, revenue enhancement, and cost containment to move the program to break-even status. Curricular revisions that necessitated the purchase of hardware and software support systems caused unit cost increases at College of DuPage.

**Program Quality.** William Rainey Harper College's program has been endorsed as the 17<sup>th</sup> National Kitchen and Bath Association (NKBA) endorsed program in the country. Prairie State College reports the strengths of its program are in retention, instruction, and a strong curriculum. Students can transfer successfully to pursue a baccalaureate degree. As a result of student input, expanded capstone and internship opportunities will be pursued. The Interior Design and Applied Fine Arts departments co-sponsor "Dine with Design," a luncheon event to which high school art faculty are invited and presentations are given on new programs/enhancements at Prairie State. In addition, students in the program have provided design consultation services to different community organizations under the direction of the program coordinator.

### Library Assisting

Number of colleges offering training	9
Program cost	Average
Job outlook	Balanced
Percent of 1997 follow-up respondents employed or continuing education	95 percent
Percent of 1997 employed follow-up respondents working full-time	54 percent
Percent of 1997 employed follow-up respondents working in related job	95 percent

As a result of program review during fiscal year 1999, nine programs will be continued with minor improvements, one will be significantly modified and reviewed again next year, and an inactive program at Wabash Valley College is being withdrawn.

**Program Need.** *Horizons (1999)* reports that average employment growth is expected for library assistants both nationally and in Illinois through 2006. The need for library assistants is expanding into business, law, school, and special libraries. Library Technical Assistants are being utilized in place of librarians where possible. Colleges report that the addition of technology has changed the nature of library work and increased the need to train new workers and upgrade the skills of current workers. Library Assisting is a small program area that enrolled 261 students in fiscal year 1996 and 238 in fiscal year 1998, a decrease of nearly nine percent. During that same time period,

completions decreased from 66 to 55, or approximately 15 percent. College reports, however, indicated that market demand for this occupation is adequate.

**Program Cost.** The average statewide unit cost for library technical assisting programs falls in the average range, meaning that it is within 10 percent of the average statewide unit cost for all occupational programs. Black Hawk College reports that the independent study format of its program is very cost effective. College of Lake County maintains a cost-effective program by utilizing only part-time faculty who are experienced library professionals. Wilbur Wright College has reassigned time for portions of classes to full-time faculty librarians as part of their workload.

**Program Quality.** Colleges consistently reported strong relationships with area and statewide libraries and library systems resulting in high placement rates for students and graduates. Black Hawk College states that students report that their position, rate of pay, or set of responsibilities was significantly impacted as a result of completing the LTA certificate. College of Lake County completely revised its program in 1998 to create a technology-based curriculum. The college's advisory committee will examine awarding program credit for work experience. Illinois Central College made important revisions to its program. Syllabi were updated, one course was added, five were withdrawn, changes in related course offerings were accommodated, and new standards for the program were implemented. The college's program is part of a cooperative education agreement among seven community colleges in West Central Illinois with courses being offered via distance learning. College of DuPage reported on LTA Illinois, an interactive distance learning certificate program offered throughout the state, which is currently delivered to 60 students. The college will market the program more effectively throughout the Chicago Public Schools and Chicago Public Library System and develop instructional modules for computer-assisted delivery of instruction to better utilize staff time. Consideration will be given to phasing out the AAS option since most students prefer the certificate track.

### **Plumber and Pipefitter**

Belleville Area College is the only college that offers a program in this field. The program was not included in the 1998 Occupational Follow-Up Study due to an insufficient number of graduates or survey respondents. As a result of program review during fiscal year 1999, the college will continue both the certificate and degree programs with minor improvements.

**Program Need.** Enrollments in these programs slightly more than doubled between fiscal years 1996 and 1998 from 29 to 59, and completions doubled from three to six during the same period. The college reports that enrollment trends and labor market data support a need for the program. *Horizons (1999)* projects that employment in this occupation will grow slightly slower than the average for all occupations through 2006. In addition, the outlook is dependent on the level of commercial and residential construction activity, and many positions are seasonal. This is a competitive, high-wage occupation in which most job openings will result as workers leave the labor force. However, opportunities are favorable for qualified individuals.

**Program Cost.** The costs associated with Belleville's programs are in the average range when compared to all occupational program costs statewide, and the College reports that the programs are cost-effective.

**Program Quality.** Indications of program quality include a dedicated adjunct faculty with industry experience, adequate equipment and facilities, and support from industry.

### Heating, Ventilation, Air Conditioning, and Refrigeration Mechanic

Number of colleges offering training	25
Program cost	Moderately High
Job outlook	Balance
Percent of 1997 follow-up respondents employed or continuing education	94 percent
Percent of employed 1997 follow-up respondents working full-time	95 percent
Percent of employed 1997 follow-up respondents working in related jobs	76 percent

As a result of the review of programs in this area during fiscal year 1999, 47 programs were continued with minor improvements, two programs were significantly modified, and one program was discontinued.

**Program Need.** *Horizons (1999)* indicates that the need for Heating, Ventilation, Air Conditioning, and Refrigeration technicians will grow faster than average in Illinois through 2006. Demand within this occupation generally follows trends in construction of new buildings. In addition, energy saving concerns and new technologies will create work remodeling older buildings and installing newer, more efficient systems. Not surprisingly, most of the colleges reported a high demand for this program and abundant job opportunities for students, since new construction is near an all-time high. In addition, the College of Lake County reported that many new jobs and skills are required due to new regulations and requirements of the Environmental Protection Agency and changes in technology. Statewide, this is a large program that consistently enrolls over 2,000 students per year. Between fiscal years 1996 and 1999, enrollments declined slightly (5 percent), while completions increased by about 10 percent, but remained low in comparison to enrollments. Several colleges indicated that completion rates appear low in relation to enrollments because (1) students are often hired before they complete the program, and (2) many students are already employed in the field and taking courses to upgrade specific skills. There were some colleges that reported declining enrollments in this program area. The College of DuPage attributed a small decline in enrollment to the high demand of the labor market, since additional education beyond high school is not an absolute requirement for employment in this field. Similarly, Lincoln Land Community College attributed declining enrollment to the strong economy. The college is adding an advanced certificate that is expected to increase enrollment. At Richland Community College, enrollments were erratic during fiscal years 1997 - 1999 due to instructor turnover. The college expects the program to stabilize under new leadership. A 17 percent decline in enrollment over the past five years at Sauk Valley Community College was attributed largely to curriculum and course sequencing problems. Overall, colleges indicated that there is strong demand for these programs.

**Program Cost.** Overall, program costs in this area are moderately high, meaning that they are 20-30 percent higher than the average cost for all occupational programs, due to the need for specialized equipment and frequent updates required to keep pace with changing technology and environmental regulations. Most programs were at or near the statewide average for this occupational area. Colleges with program costs above the statewide average in this area cited full-time faculty salaries

and equipment replacements as the primary reasons. Elgin Community College, Morton College, and Oakton Community College all reported that equipment donations from business and industry have helped contain program costs. Black Hawk College offers the program through a cooperative agreement with Scott Community College in Iowa, and attributes lower program costs to this shared arrangement.

**Program Quality.** Nearly every college report cited faculty with relevant industry experience, strong advisory committees, and adequate equipment and facilities as program strengths. In addition, Elgin Community College, Kennedy-King College, Illinois Central College, and Prairie State College all indicated that their programs were strengthened through association with national professional organizations. Difficulty keeping pace with changing technology and recruiting students from certain populations were the most frequently-mentioned problems in this program area. In addition to impacting the equipment budget, technological change necessitates continuous faculty development, which is often costly and time-intensive. Several colleges also indicated a need for increased marketing and recruitment efforts, particularly targeting high school students and women.

Quality improvements that are planned as a result of program review are numerous. Belleville Area College, the College of DuPage, Kennedy-King College, Lincoln Trail College, the College of Lake County, Morton College, Sauk Valley Community College, and Southeastern Illinois College all plan to update curricula, primarily to incorporate training to meet new industrial requirements and/or to incorporate computer-based instruction and industrial software. Black Hawk College, Kennedy-King College, Joliet Junior College, Moraine Valley Community College, Oakton Community College, Rend Lake College, and Richland Community College will increase recruitment efforts. In addition, the College of Lake County plans to determine whether third-party testing of students is a viable measure of student learning achievement. The college will also explore ways to incorporate access to current labor market information into classes. Prairie State College will address concerns about inadequate student preparation by requiring students to take placement tests and making Introduction to Computers a program prerequisite. Sauk Valley Community College identified a need for extensive curriculum revision and will employ an outside consultant to review the program and make recommendations during fiscal year 2000.

The colleges also reported a number of quality enhancements and positive initiatives that were accomplished during fiscal year 1999. For example, Kennedy-King College's Opening Doors and Changing Lives program offered a short HVACR certificate option to 15 students to provide them with job skills in a minimum amount of time. Nearly half of the students received offers of employment prior to program completion. The College of DuPage joined with a group of colleges to create an organization for shared faculty development. At the College of Lake County, faculty and staff affiliated with outside agencies to administer EPA-approved testing for refrigerant handling. An internship class and seminar were added at Moraine Valley Community College to allow students to gain working knowledge of companies and companies to observe prospective employees.



### Architectural Drawing

Number of colleges offering training	19
Program cost	High
Job outlook	Slight surplus
Percent of 1997 follow-up respondents employed or continuing education	97 percent
Percent of 1997 employed follow-up respondents working full-time	91 percent
Percent of 1997 employed follow-up respondents working in related job	62 percent

Program review reports indicated that 33 programs were continued with minor improvements, two programs were significantly modified, six were withdrawn, and three will be reviewed again in the coming year.

**Program Need.** The Occupational Outlook Handbook (1998-99) states that the employment of drafters is expected to change little through the year 2006. Opportunities are best for job seekers with at least two years of training in a technically strong drafting program and who have considerable skill and experience using CAD systems.

Statewide, enrollment figures show a decrease of 14 percent in enrollments between fiscal year 1996 and 1998, and a decline of 12 percent in the number of graduates. Despite the low enrollment concerns evidenced in some reports, a few colleges indicate strong program enrollment primarily from students seeking initial training while others contend that there is greater demand from employed individuals seeking to upgrade skills. William Rainey Harper College, Rend Lake Community College and Heartland Community College all report that demand for architectural drafting skills is greater than supply. Heartland noted that faculty actively promote the program in district high schools, area vocational centers and among local employers. Harold Washington College claims courses are well-attended by program majors and working professionals upgrading skills. Both Washington and Wilbur Wright College have successfully linked their program with high school feeder programs to provide beginning CAD training. Two colleges in the southern part of the state, Kaskaskia College and Rend Lake College, indicated that students often must relocate, as the demand in the colleges' districts is minimal.

To improve enrollments, colleges have implemented or will consider the following: open entry/open exit enrollment (Harper, Kaskaskia); shorter term programs (Wright, Oakton) improved course scheduling (College of Lake County), and alternative delivery methods (Oakton, Harper).

**Program Cost.** Costs in this program area tend to be high due to technological upgrades and typically low enrollments.

**Program Quality.** William Rainey Harper College will increase the level of technology to include computer animation and virtual reality to remain competitive, and develop a second year transfer option. Rend Lake College and Lake Land College will also improve articulation. Oakton Community College reports good articulation with UI-Chicago and UI-Urbana/Champaign, Illinois Institute of Technology, SIU-Carbondale and the University of Wisconsin at Milwaukee as well as good interdepartmental cooperation with other areas of the college: the architectural drawing

component and real estate program in providing courses on building codes and zoning, the engineering and mechanical design programs on sharing computer-assisted drafting courses; the construction management component and air conditioning, heating, and refrigeration program on commercial construction. College of DuPage is adding an Architectural Historic Preservation program. Heartland Community College will include drafting facilities in a Workforce Development Center. The college also qualified for a Technical Application Partnership software grant through VISIO INC. and received IntelliCAD software for itself and all interested schools within its district. Illinois Central College plans to upgrade its global positioning system. Lincoln Trail College indicates its program strength is the diversity of subject areas: construction materials and methods, residential and light commercial drafting and design, computer aided drafting, structural detailing and reinforced concrete. Likewise, Olive-Harvey College will explore additional programs related to architecture and building construction that may attract students. College of Lake County included the development of program learning outcomes as part of its review process and will ensure that its certificate program is structured accordingly. Triton College students had real-world design and planning experiences working directly with scientists at the University of Chicago on an Antarctic research project. At Olive-Harvey College, design class projects included planning an expansion of the campus, a project that has generated enormous interest throughout the College and has begun to generate additional design projects for specific departments.

### Mechanical Drafting

<b>Number of colleges offering training</b>	<b>21</b>
<b>Program cost</b>	<b>Moderately High</b>
<b>Job outlook</b>	<b>Slight surplus</b>
<b>Percent of 1997 follow-up respondents employed or continuing education</b>	<b>100 percent</b>
<b>Percent of 1997 employed follow-up respondents working full-time</b>	<b>96 percent</b>
<b>Percent of 1997 employed follow-up respondents working in related job</b>	<b>81 percent</b>

Mechanical Drafting programs are closely related to Computer-Assisted Design and Architectural Drawing programs. At some colleges, due to departmental organization and the degree of sharing of faculty, curriculum, and/or facilities among these programs, program review results are combined and reported on one of these related areas. Of the colleges that reported information for this program area as a result of program review during fiscal year 1999, fourteen programs will be continued with minor improvements, one was discontinued, and four will be reviewed again in the coming year.

**Program Need.** *Horizons (1998)* lists slower than average employment growth is expected through 2005. It adds, "there are more people completing education programs in drafting than there are expected job openings." An analysis of the statewide average of enrollments and completions shows that program enrollments decreased 15 percent, while completions increased 35 percent from fiscal years 1996 to 1998. Both Harry S Truman College and Moraine Valley Community College report substantive increases in both enrollments and completions and that the local openings for jobs has been so strong that many students are taking these positions and are not continuing their education or are extending the time to graduate. At Moraine Valley, related industries are requesting both part-time and full-time help, contacting the college every 2.75 days for qualified job seekers. Danville



Area Community College examined its local labor market and learned that few jobs are available for those with only a certificate in mechanical drafting; instead, most positions require at least an associate degree. The college will eliminate its certificate. Morton College's program is specifically designed for individuals who are currently working full-time in various other occupations, but are considering making a career change to CAD/drafter/designer. To accommodate this group, classes are offered on evenings and weekends. The program provides entry-level skills for jobs in CAD and can matriculate into the AAS degree, if desired.

**Program Cost.** The statewide average of unit costs in this program area tends to be high due to the number of colleges implementing technological upgrades and the typically low enrollments. The true cost of a program can be difficult to determine since courses may be assigned to a code other than the code assigned to the program. Colleges noted the use of part-time faculty as a cost-saver.

**Program Quality.** Lincoln Land Community College will revise its curriculum so students have more options available: a transfer option, an AAS option, and a certificate. Likewise, Richland Community College will create a career ladder of programs that lead directly to entry-level employment, including an associate of applied science degree and a baccalaureate degree. The AAS degree will be modified to include an internship experience. The college also will explore new ways to improve access to the College and program for industry employees who find themselves working rotating shifts. Richland's program is structured with a number of dual enrollment courses. Consequently, in a lab setting, there may be three different levels of students. This allows the college to run lower enrolled classes more efficiently. Moraine Valley Community College received a National Science Foundation Grant for Rapid Prototyping. The college was regional host to the Illinois Drafting Teachers Education Association High School competition. Harry S Truman College will consider compressing courses to less than 16 weeks to increase enrollment. The college will form a district-wide advisory committee and install a smart classroom for the CADD/CNC classes. Sauk Valley Community College will hire a consultant to address curriculum and course sequencing and will also consider in-service versus pre-service training options. A new placement office is expected to enhance the linkages between employers and graduates.

### Typesetting, Make-up & Composition

<b>Number of colleges offering training</b>	<b>3</b>
<b>Program cost</b>	<b>Moderately High</b>
<b>Job outlook</b>	<b>Sharp decline</b>
<b>Percent of 1997 follow-up respondents employed or continuing education</b>	<b>100 percent</b>
<b>Percent of 1997 employed follow-up respondents working full-time</b>	<b>100 percent</b>
<b>Percent of 1997 employed follow-up respondents working in related job</b>	<b>100 percent</b>

As a result of program review during fiscal year 1999, all three colleges that offer programs in this occupational area will continue them with minor improvements.

**Program Need.** According to *Horizons (1999)* employment of prepress machine operators, such as typesetters, is expected to decline sharply. For compositors and typesetters, competition for jobs will

be keen. College of DuPage says the average enrollment decline of 5.7 percent for the last five years is attributed to increased demand because many students are employed before program completion. Statewide, enrollments and completions have been relatively stable over the past three years, but numbers of students are extremely small.

**Program Cost.** Institutions that offer these programs indicate that they are cost-effective. Equipment and maintenance costs keep program costs in the moderately high range. Grant monies, retirements, and increased enrollment due to a high school partnership were credited with reducing program costs that often result when student numbers are low.

**Program Quality.** Kennedy-King College reports that it will include web-page design and Internet use in its electronic publishing classes. Likewise, Triton College plans to install a web press and develop a digital reproduction facility. High school, senior institution and business partnerships are critical to program success at both Kennedy-King and Triton College. College of DuPage has a unique dual program of prepress and press. Students can enroll in traditional courses or those that concentrate on desk-top publishing, or include a mixture of each to meet program requirements.

### Lithography, Photography & Platemaking

<b>Number of colleges offering training</b>	<b>5</b>
<b>Program cost</b>	<b>High</b>
<b>Job outlook</b>	<b>Declining demand</b>
<b>Percent of 1997 follow-up respondents employed or continuing education</b>	<b>100 percent</b>
<b>Percent of 1997 employed follow-up respondents working full-time</b>	<b>98 percent</b>
<b>Percent of 1997 employed follow-up respondents working in related job</b>	<b>92 percent</b>

Statewide, program costs for this occupational area are high, meaning they are 50 percent or more higher than the statewide average for all occupational programs. This is largely due to the need to purchase and maintain specialized equipment.

**Program Need.** According to 1998-1999 *Occupational Outlook Handbook*, occupations such as platemakers and photographers are expected to decline as hand work becomes automated. Statewide, the number of enrollments has declined 23 percent, while the number of completers has declined 36 percent. Colleges report that need for certificates and degrees in this area is justified, in part, because of the number of students who take courses and obtain employment prior to graduating.

**Program Cost.** Costs are among the highest of programs evaluated this year.

**Program Quality.** Colleges reported numerous program enhancements. For example, South Suburban College will add screen printing as a course and develop a mini-certificate in Digital Printing. A survey of local industries is planned. The college is an active member of the Chicago Area Community College Graphic Arts Consortium which enables students to choose a variety of classes and attend any one of the member schools at an in-district cost. Kennedy-King College has

a Tech Prep, ISBE-supported education to careers program and has integrated training with academic units of the college.

### **Printing Press Operations**

This very small program was not included in the 1998 Occupational Follow-Up Study due to an insufficient number of graduates or survey respondents. One college, South Suburban, reviewed this program during fiscal year 1998 and will continue its degree and certificate programs with only minor improvements.

**Program Need.** Industry has a shortage of trained, experienced technicians for anticipated demand of printed materials. However, more efficient computerized printing press will offset employment growth. According to the Educational Testing Service, "printing technicians" is expected to have a mixed growth rate; however, those familiar with the most up-to-date technology will have the best chances for advancement. Statewide, this is a very small program, with 16 enrollments in fiscal year 1996 and 22 in fiscal year 1998, and one completion in each of those years. The demand for this occupation is high in the Chicago area. The college reported that students are offered jobs in this field whether or not they have completed their program.

**Program Cost.** The cost of printing press operations programs is in the high category, meaning that costs are more than 50 percent greater than the average cost for all occupational programs, primarily due to the need to purchase and maintain specialized equipment.

**Program Quality.** Program quality initiatives were previously mentioned in the related program areas of typesetting and lithography.

### **Desktop Publishing Equipment Operator**

<b>Number of colleges offering training</b>	<b>18</b>
<b>Program cost</b>	<b>Moderately High</b>
<b>Job outlook</b>	<b>Supply and demand are balanced</b>
<b>Percent of 1997 follow-up respondents employed or continuing education</b>	<b>87 percent</b>
<b>Percent of 1997 employed follow-up respondents working full-time</b>	<b>77 percent</b>
<b>Percent of 1997 employed follow-up respondents working in related job</b>	<b>73 percent</b>

Fiscal year 1999 program review reports show that colleges were quite satisfied with the state of their programs in desktop publishing. Seventeen programs will be continued with minor improvements and one will undergo significant change. No programs will be discontinued and none are scheduled for a subsequent review next year.

**Program Need.** According to the 1998-1999 Occupational Outlook handbook, employment of desktop publishing specialists is expected to grow much faster than average. Businesses that used to pay an advertising agency for artistic layouts now find it more cost-effective to create these in-house or contract independently. Students need both computer skills and artistic talent to be

successful, and competition is expected to be keen. Many students attend college simply to acquire skills that can be learned in a single class. Between fiscal years 1996 and 1998, statewide averages of enrollment information in this program area shows gains of nearly 3 percent, while completions declined 16 percent.

**Program Cost.** Statewide, the average unit cost for desktop publishing programs is moderately high, meaning that the program cost is from 20-30 percent higher than the average cost for all occupational programs. Continuing technology costs cause curricula in this program area to be above average for most institutions. However, small class sizes, and in one case, substantial start-up costs, also contributed to higher costs. One college will minimize costs by eliminating one full-time faculty position.

**Program Quality.** The colleges reported a broad array of program enhancements in this occupational area. Lewis and Clark Community College is working on a night schedule that will be published in the catalog to encourage currently employed students to complete their degree. Parkland College learned, through the program review process, that the fields of visual arts and desktop publishing have merged in the workplace. Students who graduated in visual arts were returning to complete the desktop publishing program. As a result, the college will withdraw its visual arts program. In addition, Parkland has added a formal portfolio review process for graduates. Highland Community College will add new equipment for low vision students, two adjusting work centers for students in wheelchairs, and new software to allow audio interpretation of graphic displays for visually-impaired students. A time and task study will be conducted to find methods to improve services/assistance to students and contain costs. Moraine Valley will increase internship sites, strengthen the focus on job placement workshops, and review its curriculum for efficiency. Belleville Area College will add new facilities in fall 2000. A new webmaster degree will offer better web-based opportunities for students. Articulation strategies with four-year institutions will be pursued. Triton College will incorporate new digital equipment technologies and installation of a web press is planned. Illinois Valley Community College reports that the Illinois Valley Education-to-Careers Partnership graphic arts committee, made up of local publishers and printers, has joined with the college's advisory council to help guide this program. An AAS program is scheduled to be developed in the next two years.

**Machine Tool Operation/Machine Shop  
Machinist/Machine Technologist**

<b>Number of colleges offering training</b>	<b>32</b>
<b>Program cost</b>	<b>Moderately High</b>
<b>Job outlook</b>	<b>Slight Shortage</b>
<b>Percent of 1997 follow-up respondents employed or continuing education</b>	
<b>Machine Tool Operation/Machine Shop</b>	<b>96 percent</b>
<b>Machinist/Machine Technologist</b>	<b>100 percent</b>
<b>Percent of employed 1997 follow-up respondents working full-time</b>	
<b>Machine Tool Operation/Machine Shop</b>	<b>97 percent</b>
<b>Machinist/Machine Technologies</b>	<b>100 percent</b>
<b>Percent of employed 1997 follow-up respondents working in related jobs</b>	
<b>Machine Tool Operation/Machine Shop</b>	<b>88 percent</b>
<b>Machinist/Machine Technologist</b>	<b>100 percent</b>

Only three colleges offer Machinist programs. Program Review information for that occupational areas was combined with the larger program area of Machine Tool Operation, because program content and issues are very similar. As a result of program reviews during fiscal year 1999, 55 programs were continued with minor improvements, one program was significantly modified, five programs were discontinued, and two programs were scheduled for further review during fiscal year 1999.

**Program Need.** *Horizons (1999)* indicates that both in the nation and the state, employment of machinists is expected to decline slightly through the year 2006. Outlook depends on replacement of those who leave the occupation, technological change, and the amount of new machinery and machinery repairs needed by manufacturing industries. In Illinois, a large number of job openings will occur each year as experienced workers leave the labor force. There is a slight shortage of applicants completing apprenticeships and other training programs as machinists, and opportunities should be good for qualified individuals. Statewide, this is a large occupational area that enrolled over 1,300 students during the period fiscal year 1996 - 1998, with completions ranging from 131 to 122 during the same period. Colleges indicated more than adequate market demand for these programs based on enrollments, placement rates, and advisory council recommendations. Demand is such that many students accept employment before completing their entire program of study. In addition, many students are already employed in the field and taking courses to upgrade their skills. Both of these factors contribute to low completion rates.

**Program Cost.** Program costs in this occupational area are moderately high, meaning they are 20-30 percent higher than the average cost for all occupational programs. Colleges with program costs that were above the statewide average for this occupational area cited full-time and senior faculty salaries and equipment replacement as factors that contributed to cost levels. In general, colleges reported that programs in this area are cost-effective.

**Program Quality.** Quality indicators most frequently mentioned by the colleges include dedicated faculty with industry experience, adequate facilities and equipment, and support from local industry. Several colleges reported that hiring qualified faculty is a challenge, since industry generally offers higher wages and better benefits. Illinois Central College, Kishwaukee College, Moraine Valley Community College, and Oakton Community College all indicated a need for recruitment and marketing, particularly to high school students and industry. A number of program enhancements were reported. For example, Kennedy-King College integrated the NIMS Level 1 Metalworking Skill Standards Credentialing process into its program and added three new courses. With the help of local industry, the College of Lake County has been able to significantly update the equipment in its program over the past five years. McHenry County College will coordinate course offerings within the Academy for High Performance and the manufacturing programs to give students access to courses in both areas. In addition, the college recommends that the courses be open-entry/open-exit. Richland Community College offers a number of courses with dual enrollment, meaning a lab may have two different levels of students working at the same time. This allows the college to offer some classes with low enrollments that it would not be able to offer otherwise. The college also plans to create career ladder certificates that lead directly to entry-level employment, with an associate of applied science degree and a baccalaureate degree as options. Similarly, South Suburban College will link the machine tool program to the Manufacturing Technology AAS degree model endorsed by the IAI panel.



## Sheet Metal Worker

<b>Number of colleges offering training</b>	<b>7</b>
<b>Program cost</b>	<b>Moderately High</b>
<b>Job outlook</b>	<b>Balance</b>
<b>Percent of 1997 follow-up respondents employed or continuing education</b>	<b>100 percent</b>
<b>Percent of employed 1997 follow-up respondents working full-time</b>	<b>100 percent</b>
<b>Percent of employed 1997 follow-up respondents working in related jobs</b>	<b>100 percent</b>

As a result of the review of Sheet Metal programs during fiscal year 1999, six programs will be continued with minor modifications, one program will be discontinued, and one program that is currently inactive will receive further review during fiscal year 2000.

**Program Need.** *Horizons (1999)* indicates that nationally, employment of sheet metal workers is expected to increase about as fast as the average for all occupations through 2006, while in Illinois, slower than average growth is expected. Outlook depends on the demand for sheet metal products and on the level of residential and commercial construction activity. Competition for jobs may be keen, and individuals who have completed formal training or apprenticeship programs should see the best opportunities. Statewide, sheet metal is a small program that has experienced an erratic enrollment pattern between fiscal years 1996 and 1999 (189 in fiscal year 1996, 224 in fiscal year 1997, and 95 in fiscal year 1998), while completions have remained fairly stable. For the most part, the colleges indicated a demand for Sheet Metal workers within their districts as evidenced by successful placement of graduates. This is another area where many students are already employed in the field and seeking skill upgrades, which contributes to low completion rates. Sheet metal courses are also used extensively in programs in heating, ventilation, air conditioning, and refrigeration (HVACR).

**Program Cost.** Compared to statewide costs for all occupational programs, Sheet Metal program costs are moderately high, due to the need for specialized equipment and work space and use of large amounts of consumable supplies. The colleges reported that the programs operate in a cost-effective manner.

**Program Quality.** Colleges indicated that faculty with industry experience, up-to-date equipment and facilities, and support from local industry all contribute to program quality. Program enhancements reported include Belleville Area College's plan to work with local unions and industries to insure that new technology is incorporated into the program. Lincoln Trail College identified the need to incorporate instruction related to insulation and duct design calculation into the curriculum, and plans to purchase the necessary equipment and instructional materials to do so. Southeastern Illinois College plans to discontinue the Sheet Metal program, but will retain courses that support the HVACR program that is offered at the Shawnee Correctional Center.

### Tool and Die Maker/Technologist

<b>Number of colleges offering training</b>	<b>12</b>
<b>Program cost</b>	<b>Average</b>
<b>Job outlook</b>	<b>Slight Shortage</b>
<b>Percent of 1997 follow-up respondents employed or continuing education</b>	<b>91 percent</b>
<b>Percent of employed 1997 follow-up respondents working full-time</b>	<b>100 percent</b>
<b>Percent of employed 1997 follow-up respondents working in related jobs</b>	<b>91 percent</b>

Information from the review of one Patternmaker program, the only one in the state, was included with Tool and Die programs because of the closely related nature of the programs. As a result of the review of these programs during fiscal year 1999, 12 programs were continued with minor improvements, and one program was discontinued.

**Program Need.** According to *Horizons, 1999*, nationally and in Illinois, employment for tool and die makers is expected to decline slightly through 2006. However, ample job opportunities will exist for individuals skilled in using computerized systems that are being increasingly employed by tool and die manufacturers. Statewide, the Tool and Die program area is small with enrollments ranging from 227 in fiscal year 1996 to 245 in fiscal year 1998. Completions have increased from 46 in fiscal year 1996 to 55 in fiscal year 1998. While enrollments in some tool and die programs are small, colleges affirmed a need based on labor market information and recommendations from industry representatives and local advisory councils. Kishwaukee College reported that some local employers have established tuition and fee reimbursement programs to enable employees to attend classes part-time. The college indicates that managerial positions are available to degree graduates. Prairie State indicated that enrollments are cyclical because the College often works with cohorts of employees from a particular employer, and there can be lulls between cohorts.

**Program Cost.** Compared to all occupational programs, statewide costs for Tool and Die programs are average. Colleges with program costs in this area that are above the statewide average cited full-time faculty salaries, the rising cost of consumable materials, and equipment purchases as contributing factors. Cost containment efforts reported include merging sections of courses to achieve maximum class size and accepting equipment donations. Kankakee Community College was able to contain program costs and fulfill a commitment to update the machine shop with new equipment largely because the program is staffed by part-time instructors and coordinated by a full-time instructor as an overload assignment.

**Program Quality.** The colleges most frequently mentioned faculty with industry experience, adequate equipment and facilities, curricula that incorporate occupational skill standards, and support from local industry as factors that contribute to program quality. Kishwaukee College also indicated strong tech prep programs with high schools through its manufacturing academy. The college plans to explore coordination of the curriculum with electronics, drafting, and welding to see if cross-department projects can enhance the program. Elgin Community College, Illinois Valley Community College, and Kankakee Community College all plan to develop recruitment/marketing plans, particularly targeted to high school students and local employers. In addition, Elgin is developing computer aided instruction with use of digital imaging equipment that will allow for



instruction that is customized to the equipment in the college lab. Prairie State College will add a Computer Numerical Control course to the program.

### **Welding, Brazing, and Soldering**

<b>Number of colleges offering training</b>	<b>32</b>
<b>Program cost</b>	<b>Moderately High</b>
<b>Job outlook</b>	<b>Balance</b>
<b>Percent of 1997 follow-up respondents employed or continuing education</b>	<b>92 percent</b>
<b>Percent of employed 1997 follow-up respondents working full-time</b>	<b>96 percent</b>
<b>Percent of employed 1997 follow-up respondents working in related jobs</b>	<b>88 percent</b>

As a result of program reviews conducted during fiscal year 1999, 50 welding programs will be continued with minor improvements, and five programs will be discontinued. Programs being discontinued were considered too narrow in scope.

**Program Need.** In both Illinois and the nation, slower than average growth is expected in the employment of welders through 2006. As new welding technology is developed, demand for welders skilled in these methods will increase. In addition, welders will continue to be needed for maintenance and repair of existing infrastructures. Most job openings will result from the need to replace experienced workers who leave the labor force. (*Horizons, 1999*) Statewide, welding is a large program that has experienced constant enrollments and completions between fiscal years 1996 and 1998. Completions are low in comparison to enrollments, i.e., 1610 enrollments statewide in fiscal year 1998 and 253 completions. College reports indicated a need for welding programs. The programs serve students who wish to become welders, who are currently employed in the field and need to upgrade skills, and those who need welding skills for a related occupation. The College of Lake County pointed out that welding is a necessary and desirable skill in many industrial and service occupations including maintenance and repair of all types; pipefitting, heating and ventilation technicians; ironworkers; mechanics; boiler makers; fabricators; tool and die repair; auto body repair; machinists; operating engineers; sheet metal workers; millwrights; other metal workers and many union trades including electricians, bricklayers, carpenters and others. Accordingly, many colleges indicated that courses in welding programs support many other related programs as well. The broad application of welding skills may explain why only about two-thirds of the follow-up respondents reported working in welding positions. Similarly, many colleges reported that students often enroll in courses to gain specific skill sets and do not necessarily desire to earn a certificate or degree.

**Program Cost.** In comparison to all occupational programs, costs for welding programs are moderately high, primarily due to the cost of specialized equipment and disposable materials. Some colleges use laboratory fees to help offset the cost of consumable supplies. In general, colleges that had program costs for welding that were above the statewide average had experienced enrollment declines or have enrollment limitations due to available facilities and/or equipment. Colleges that rent instructional facilities for welding programs also report that tends to cause high program costs. Both Elgin Community College and Kaskaskia College reported significant increases in program costs due to extensive replacement of aging equipment. The most common cost-containment

measure reported was the donation of equipment and/or supplies from local business and industry. Overall, most colleges concluded that welding programs were cost-effective, or that the benefits of offering the programs outweighed the costs.

**Program Quality.** The most common factors cited in support of program quality included faculty with industry experience, adequate facilities and equipment, and tech prep or dual enrollment programs with high schools. Some of the most common challenges faced by welding programs include low completion rates, maintenance of equipment and facilities, and inadequate use of advisory committees. Colleges that identified these challenges indicated a variety of advisement and counseling strategies aimed at promoting higher completion rates. There was also a recognition of the increasing need for students already experienced in welding to acquire new specialized skills. To address this need, the College of Lake County, Carl Sandburg College, Moraine Valley Community College, and Richland Community College all plan to develop short specialized certificates in welding. In addition, Elgin Community College and Richland Community College offer open-entry/open-exit instruction during the day. Carl Sandburg College also utilizes an open-entry system for practical lab welding courses. Classes are taught on a four-week basis, allowing students to drop in for short segments of skill training as needed, rather than having to commit to a full semester obligation. Richland has also initiated a fast track program that allows students to take welding classes four days a week in order to complete the program in an accelerated time frame.

Other evidence of program quality include Rend Lake College's strong relationship with area industry that has provided employment for several students. The college hosts an annual high school welding contest, which is sponsored by a local supply company. Last year, a local manufacturer began providing tuition assistance for students who intend on pursuing a career in welding. Moraine Valley's program is strengthened by a professor who has worked with the United States Education Department to develop model welding programs for use throughout the nation and who serves on several national professional bodies in various capacities.

### Design and Visual Communications

<b>Number of colleges offering training</b>	<b>18</b>
<b>Program cost</b>	<b>Moderately High</b>
<b>Job outlook</b>	<b>Balance</b>
<b>Percent of 1997 follow-up respondents employed or continuing education</b>	<b>78 percent</b>
<b>Percent of 1997 employed follow-up respondents working full-time</b>	<b>71 percent</b>
<b>Percent of 1997 employed follow-up respondents working in related job</b>	<b>76 percent</b>

As a result of program review during fiscal year 1999, six programs in design and visual communications will continue with minor improvements, two programs will be significantly modified, one program will be scheduled for further review in the coming year, and one program will be discontinued.

**Program Need.** According to *Horizons (1999)*, employment in Illinois for both graphic artists and designers is expected to grow faster than average through 2006. Many people complete training programs in graphic design and related programs each year. There should be good opportunities for

creative people with excellent design and computer skills. Based on projections from the Bureau of Labor Statistics, there will be an increase in annual job openings of 17 percent nationwide and 36 percent in Illinois by 2006. Statewide, this is a fairly large program area with enrollments that increased from 1,256 in fiscal year 1996 to 1,387 in fiscal year 1998. During the same time period, completions increased from 99 to 111. The colleges were in agreement that adequate demand exists for programs in this field. Black Hawk College expects to see program growth as a result of the availability of a new instructional facility and a new art faculty member. Harold Washington College indicated that enrollments in the Commercial Art program are small, but courses within the program are heavily enrolled by students from other programs who desire knowledge of computer graphics, as well as working professionals upgrading their skills. The college plans to incorporate computers into all courses for the program and expects to see an increase in the number of majors as a result. Kennedy-King College reported no enrollments in its Commercial Art program and has recommended that it be discontinued, and Richard J. Daley College reported that low enrollment in its Communication Arts program will lead to a year of further review to determine the feasibility of continuing the program.

**Program Cost.** Program costs in Design and Visual Communications are moderately high in comparison to costs for all occupational programs statewide. This is true for a number of program areas that are equipment-intensive and depend on continuous technological updates. Prairie State College attributed higher-than-average costs for this program area to addition of a full-time member and costs to maintain and replace equipment and software. Black Hawk College reported that the availability of a larger instructional facility will allow increased enrollments, which is expected to have a moderating effect on program costs. Fiscal year 1998 was the initial year for the program at Moraine Valley, so program cost data is not yet available. Colleges that recommended continuation of the programs indicated that they are cost-effective in that the benefits of offering the programs outweigh the costs.

**Program Quality.** Colleges pointed to highly qualified faculty, up-to-date computer hardware and software; development of student portfolios, and the availability of internships as indicators of program quality. Black Hawk College noted that the up-to-date program software also serves art transfer students and those seeking continuing education opportunities.

Colleges also reported a number of program enhancements that have been implemented or are planned. For example, South Suburban College is considering developing an AAS degree program in Graphic Arts in addition to its current certificate program. With leadership from a new full-time faculty member/coordinator, Prairie State College is updating the entire program curriculum to incorporate new technology, restructure course content and sequence, and add new short-term certificates. In addition, transfer courses are being more tightly integrated into the program. Illinois Central College is considering converting its program to a transfer-degree program to facilitate students' completion of a baccalaureate degree for career advancement. Black Hawk College plans to integrate an internship into the Commercial Art program to give students practical experiences in the field to enhance their employability. Finally, Elgin Community College is considering student recommendations for short, focused courses that can be completed in four or eight weeks, instead of the traditional 16-week semester format.

## Commercial Photography

<b>Number of colleges offering training</b>	<b>5</b>
<b>Program cost</b>	<b>Moderately High</b>
<b>Job outlook</b>	<b>Supply and demand are balanced</b>
<b>Percent of 1997 follow-up respondents employed or continuing education</b>	<b>81 percent</b>
<b>Percent of 1997 employed follow-up respondents working full-time</b>	<b>82 percent</b>
<b>Percent of 1997 employed follow-up respondents working in related job</b>	<b>27 percent</b>

As a result of program review in the area of commercial photography during fiscal year 1999, four programs will be continued with minor improvements, two programs will be withdrawn because of low enrollments, student interest in self-improvement rather than obtaining a degree or certificate, and competition from other schools that focus solely in artistic media, including photography. Three programs will be evaluated again next year.

**Program Need.** Faster than average growth is expected in this occupation through 2006. Providing good economic times continue, the outlook for photographers should be good. Competition will be keen, with skilled, talented workers finding the best opportunities. The bottom line results listed in the paragraph above shows that colleges are serious in evaluating the need of photography programs. Statewide, enrollments increased 14 percent from fiscal year 1996 to fiscal year 1998. Completions increased 8 percent during this same time period. Although graduates are obtaining employment, of concern is the fact that nearly three of four graduates were working in an unrelated field, according to follow-up survey results.

**Program Cost.** The cost of photography programs is categorized as moderately high when compared with the cost of other occupational programs, meaning it is 20-30 percent greater than the average statewide unit cost for all occupational programs. Prairie State attributes this cost level to having to support two technologies within the program: traditional chemical processing and the new digital technology. Donations of equipment and sizeable discounts by major employers help reduce expenses. The college hopes that new state of the art facilities and equipment will attract additional students, thereby further reducing program cost.

**Program Quality.** Colleges listed faculty as one of the quality aspects of their programs. Part-time faculty, in particular, are likely to be employed as professional photographers, as well as instructors. By spring 2000, Prairie State will require all graduates to produce a portfolio for departmental review. To address the low enrollment issue, new short-term certificates will be created and marketing will be improved. In addition, the College will highlight the photography program in the fall schedule and describe new equipment and facilities. College of DuPage has added digital technology classes and will improve professional standards within the program, review equipment maintenance and updates and computer needs

### Medical Laboratory Technician

<b>Number of colleges offering training</b>	<b>15</b>
<b>Program cost</b>	<b>High</b>
<b>Job outlook</b>	<b>Slower than average growth</b>
<b>Percent of 1997 follow-up respondents employed or continuing education</b>	<b>94 percent</b>
<b>Percent of 1997 employed follow-up respondents working full-time</b>	<b>88 percent</b>
<b>Percent of 1997 employed follow-up respondents working in related job</b>	<b>80 percent</b>

As a result of the review of Medical Laboratory Technician programs during fiscal year 1999, eleven programs will be continued with minor improvements, one program was significantly modified, and one program has been discontinued.

**Program Need.** According to *Horizons (1999)*, Illinois is expected to have a slightly slower than average growth in the employment of clinical laboratory workers through 2006. Conversely, the *1998-1999 Occupational Outlook Handbook* indicates that employment of medical assistants is expected to grow much faster than the average for all occupations through the year 2006 as the health services industry expands due to technological advances in medicine, and a growing and aging population. Medical lab technicians (MLT) with a one- or two-year degree may find the best opportunities. Professional opportunities for educational mobility in this field are limited. It seems to be more economical for employers to hire two-year degree graduates versus those with a baccalaureate degree. Although there is a strong need for medical laboratory technicians in a variety of health care settings statewide, enrollments and completers in this program vary. Eight colleges report slight decreases in enrollments over the past five years, while the other colleges' enrollment have remained stable. With the exception of Black Hawk College, all colleges report good employment opportunities for graduates in this field. Black Hawk College's MLT program is offered through a cooperative agreement with Scott Community College in Iowa, and the College has discontinued the program due to unfavorable employment outlook in the area.

**Program Cost.** Unit costs of MLT programs is normally higher than the state unit cost for all occupational programs, primarily due to small class sizes and equipment costs. Community colleges receive numerous donations from expendables to equipment from affiliates and employers and also seek outside funding sources which reduces the program costs.

**Program Quality.** Several community colleges are experiencing great success in transitioning students from a phlebotomy course to a certificate program leading to a degree in an effort to bridge the gap between the phlebotomist and medical lab technician. For example, Malcom X College, Illinois Central College, Oakton Community College, Elgin Community College, and College of Lake County have a phlebotomy certificate in addition to the MLT program. Many students are able to find entry-level positions with their phlebotomy experience while continuing to pursue a two or four-year degree in other allied health areas. Although new technology has allowed clinical laboratories to become more automated, the demands for quality assurance and cost containment have led many hospitals to hire MLTs rather than medical technicians with a bachelor's degree. Analysis of the program reviews identified factors that may contribute to low enrollment, including student attrition due to the strong academic demands of the program, inadequate laboratory space



and budget restraints, limited number of clinical sites, lack of automated equipment and/or supplies, and a limited number of qualified part-time faculty.

Several colleges pointed to program accreditation and high pass rates of program completers on national certification examinations for MLTs as indications of program quality. In addition the colleges reported a wide range of program enhancements. Malcolm X College graduates have maintained an average passing rate of 95 percent on the National Certification Exam. The college has established an articulation agreement for the MLT program with the University of Illinois at Chicago. One of the more innovative approaches in the field is Moraine Valley Community College's use of interactive learning and simulation utilizing CD Rom applications to address the increasing need for clinical sites. The Lewis and Clark Community College MLT program recently moved into a specially designed area with state-of-the-art laboratories and classrooms. New equipment, computers, and software have been provided in order to maintain a quality program. Sauk Valley Community College (SVCC) program graduates have a 99 percent pass rate on the ASCP Registry Examination. Southeastern Illinois College and Sauk Valley Community College have conducted in-house recruitment from science classes. For example, SVCC presents an overview of the MLT program to their Biology classes. SVCC plans to develop Internet courses so the students at cooperative colleges can enroll in courses from home, thus decreasing the amount of time spent on campus. The program at Illinois Central College has recently undergone a curriculum revision and now includes a Histotechnology Program in cooperation with Saint Francis Medical Center in Peoria- the only histotechnology college credit program in the state.

### Ophthalmic Medical Technologist

<b>Number of colleges offering training</b>	<b>2</b>
<b>Program cost</b>	<b>Moderately High</b>
<b>Job outlook</b>	<b>Average Growth</b>
<b>Percent of 1997 follow-up respondents employed or continuing education</b>	<b>67 percent</b>
<b>Percent of 1997 employed follow-up respondents working full-time</b>	<b>100 percent</b>
<b>Percent of 1997 employed follow-up respondents working in related job</b>	<b>100 percent</b>

As a result of program review in this occupational area during fiscal year 1999, one program will be continued with minor changes and one program will be scheduled for further review in the coming year.

**Program Need.** The employment outlook in the state for ophthalmic medical technologists is very good, with demand currently exceeding supply. According to *Horizons (1999)*, average employment growth is expected in Illinois and in the nation through the year 2006. Most job openings in this occupation will be in retail optical chains and will come from the need to replace workers who transfer to other occupations or leave the labor force. Enrollments in both programs remain low which may be due to many students leaving to take jobs before completion. Given the level of compensation for professionals in this field, it would appear that more people would be attracted to the program.

**Program Cost.** McHenry County College receives support from the national and state opticianary associations as well as donated equipment from the local community. While McHenry County College has a statewide program, currently it is not cost effective given low enrollments. Triton College's accredited program continues to be cost effective despite low enrollment. Students are obtaining employment before completion, resulting in low completion rates.

**Program Quality.** Both colleges indicate that efforts should be put forth to recruit new students in the program. Program staff are collaborating with public relations staff to develop and implement marketing strategies aimed at recruiting new students at high schools and the eye care industry. McHenry County College is considering the possibility of offering a short-term certificate program in an effort to retain students in the program. For Triton College, strengths include accreditation and up-to-date laboratory equipment and quality clinical experiences and classroom equipment.

### Accounting Technician

<b>Number of colleges offering training</b>	<b>42</b>
<b>Program cost</b>	<b>Average</b>
<b>Job outlook</b>	<b>Very Good</b>
<b>Percent of 1997 follow-up respondents employed or continuing education</b>	<b>91 percent</b>
<b>Percent of 1997 employed follow-up respondents working full-time</b>	<b>87 percent</b>
<b>Percent of 1997 employed follow-up respondents working in related job</b>	<b>75 percent</b>

As a result of program review in fiscal year 1999, eighty-eight accounting programs were continued with minor improvements, two were significantly modified, one was discontinued, and one was scheduled for further review.

**Program Need.** Despite the fact that accountants and auditors, bookkeepers and accounting clerks are among the 50 occupations expected to provide the most job openings each year, a strong majority of colleges indicated declining enrollments and completions in accounting in their program review reports. Between fiscal years 1996 and 1998, program enrollments decreased 13 percent, while completions decreased only 7 percent.

Nearly all colleges agreed that training in accounting is needed in their districts; however, they differed in their determination of how this training should be provided. Some indicated that more short-term certificates were needed to respond to student and employer needs. Others found that students are more likely to complete a transfer degree containing articulated accounting courses than an Associate in Applied Science (AAS) degree that prepares students for immediate employment. Black Hawk College noted the need to develop short-term "specialty" certificates for graduates of accounting who need training for jobs such as claims examiners or pay and benefit administrators. Two of the colleges where enrollments increased during the past five years are William Rainey Harper and McHenry County College, both of which are accredited through the Association of College Business Schools and Programs (ACBSP). Harper plans to offer a more flexible schedule of courses and set up a web page for the department that includes course outlines, syllabi, assignments, scheduled office hours, etc. The college also will add writing assignments and case studies, address ethical issues, and include additional computer projects to better prepare students.

One college's enrollment data showed that most students are only interested in taking courses, not in getting a degree. The college will eliminate the program since students will have the option of taking accounting electives that can apply to other business degrees, or taking a transfer degree. At another institution where course enrollments are strong and program enrollments are weak, the college will eliminate one full-time instructor position.

**Program Cost.** Colleges indicated few concerns regarding program costs. Most were in line with the state average costs for accounting programs. However, examining costs of accounting programs alone doesn't provide the complete picture since accounting courses frequently support other curricula such as business administration, merchandising, transfer programs and computer information systems. Naturally, costs have risen as colleges integrate more and more technology in programs to simulate the workplace where many businesses rely on computers to manage day-to-day accounting tasks.

**Program Quality.** Program strengths and quality improvements were numerous. Danville Area Community College reports that a commitment to establishing tutoring, mentoring, and apprenticeship programs, and an active advisory council have contributed to increased full-time placement rates of graduates. Parkland College states that faculty are involved in periodic service in industry to stay abreast of changing needs in the workplace. One of Wilbur Wright College's accounting instructors won the Outstanding Educator award from a regional professional society of accountants. Sauk Valley Community College reports that all part-time and full-time instructors are Certified Public Accountants (CPA) with master's degrees.

Revisions to curricula were mentioned frequently. Two colleges, Elgin Community College and Wright, will seek grant funding to internationalize the curriculum to address requests by import-export businesses. Elgin was awarded a grant from the Illinois CPA Society to integrate financial and management courses into the curriculum. The college will partner with Waubensee Community College and Northern Illinois University on this project. Richard J. Daley College will expand course offerings to address emerging e-business needs. Illinois Valley Community College has a key course in the A.A.S. curriculum that requires students from many different areas (accounting, business administration, CAD, electronics, and microcomputers) to work together to set up and run their own on-campus business from product selection to design, and including cost analysis, production, marketing, and sales. In addition, sixteen colleges mentioned that Internet applications would be infused in the curriculum, either to conduct research activities in conjunction with a classroom assignment or as a means of delivering instruction to students.

A number of colleges mentioned concerns about retaining students in their accounting programs. Accounting skills are achieved in a sequential manner, and students who either don't possess the necessary math skills or cannot keep up with the instruction often withdraw from the course. South Suburban College offers part one of its financial accounting course for two credits for students who wish to take a slower pace toward mastering course concepts. Students taking traditional classes in financial accounting also have an opportunity to view a telecourse on the same topic if they have missed a session or need supplemental instruction.

Several colleges mentioned the important role that advisory committees play in developing and revising curricula, providing internship sites, etc. At Danville Area Community College, the

program's advisory committee was an active participant in the program review process. To assess the strength of its program, College of Lake County sought information and data from its advisory committee, plus faculty, current and former accounting students and graduates of the accounting program. Prairie State College and Harry S Truman College discussed the need to have a separate advisory committee from the one that serves general business programs. Three colleges, Illinois Valley Community College, College of Lake County, Harold Washington College, all mentioned establishing dual credit programs with high schools in their districts.

In the area of articulation, 36 of the 42 community colleges that have accounting programs have articulated their financial and managerial accounting courses through the IAI Business Major Articulation Panel. This means that if a student at one of these institutions transfers to another institution that is participating in the Illinois Articulation Initiative, the student will receive credit for having completed comparable courses. In the interests of student transfer, the remaining colleges are encouraged to get their financial and managerial courses in line with the IAI business panel's recommendation.

### **Banking and Financial Support Services**

<b>Number of colleges offering training</b>	<b>18</b>
<b>Program cost</b>	<b>Average</b>
<b>Job outlook</b>	<b>slight decline</b>
<b>Percent of 1997 follow-up respondents employed or continuing education</b>	<b>92 percent</b>
<b>Percent of 1997 employed follow-up respondents working full-time</b>	<b>87 percent</b>
<b>Percent of 1997 employed follow-up respondents working in related job</b>	<b>65 percent</b>

Fiscal year 1999 program review reports show that twenty-three programs were continued with minor changes; ten were discontinued, and three were scheduled for further review.

**Program Need.** According to *Horizons* (1999), overall employment in banking is expected to decline slightly, but employment for people interested in positions such as bank tellers, new accounts clerks, and loan clerks will remain stable through the year 2006. In the area of finance, the supply is expected to outweigh the demand. Statewide, the number of students enrolling in related programs declined 26 percent between 1996 and 1998. The number of graduates decreased similarly, at 23 percent.

In their program review reports, colleges found that the demand for programs in banking and finance can vary depending on employee turnover and retirements, and whether programs are affiliated with the American Institute of Banking (AIB). Banking courses often are conducted specifically for bank employees needing classes for AIB certification requirements. Enrollees receive college credit plus credit toward certification. Students that are not enrolled in banking or finance programs may take related courses as electives toward graduation requirements in areas of business such as accounting and management. If programs are not closely affiliated with the banking industry, college enrollments may suffer since certificates or degrees are not a requirement for entry level banking positions. Lincoln Trail College will discontinue its degree and certificate program since these are

not recognized by its banking community. Harold Washington College will withdraw its Associate in Applied Science degree in Finance and Credit due to high program costs and concern that the program does not provide students with the credentials and skills to gain full-time employment. Spoon River College noted declining enrollments and will discontinue a degree and five certificates. Conversely, Oakton Community College, Illinois Central College, and William Rainey Harper College noted strong or increasing enrollment patterns. Harper College consolidated instruction in banking, commercial credit, finance, insurance and real estate into one financial services degree. Harper will offer fast track or "quick career entry" options where two or three courses taken in a particular subject area can earn students "career action awards." Illinois Central College reported that its program was developed at the request of its local banking industry. Classes are developed and taught by bankers and all graduates are employed full-time.

**Program Cost.** In institutions that are AIB affiliated, AIB-certified bank employees usually provide instruction, thereby lowering costs for the colleges. Small enrollments in courses increase program costs substantially unless courses are taught by adjunct or bank employees. Most institutions indicated that instructional costs were reasonable.

**Program Quality.** A plethora of quality improvements and program strengths were reported by the colleges. For example, Morton College reports that it will examine developing a course with variable credit hours and greater flexibility, creating an Internet course, devising a certificate in finance, and creating closer ties with area businesses through its worksite program. Black Hawk College plans to conduct a Developing A Curriculum (DACUM) process with representatives of FIRE (finance, insurance, and real estate) to more closely identify training needs. Curricular revisions will include adding courses and short-term certificates, and withdrawing one certificate. Belleville Area College will review its ACBSP-accredited program again next year after gathering additional information from local industry officials. It will review course objectives, and, if appropriate, will revise program requirements, develop a marketing plan, and develop joint programming with AIB. Prairie State College believes a separate advisory committee is needed to assist with curriculum development, internship development, and marketing of its finance and credit management program. The college will consider adding an emphasis in bill and account collections and computer skills.

**Business Administration and Management** (including Logistics and Materials Management, Office Supervision and Management, Operations Management and Supervision)

<b>Number of colleges offering training</b>	<b>43</b>
<b>Program cost</b>	<b>Average</b>
<b>Job outlook</b>	<b>Slight Shortage to Sustained</b>
<b>Percent of 1996 follow-up respondents employed or continuing education</b>	<b>93 percent</b>
<b>Percent of 1996 follow-up respondents working full-time</b>	<b>88 percent</b>
<b>Percent of 1996 employed follow-up respondents working in a related job</b>	<b>74 percent</b>

Programs included in this category were reviewed in fiscal years 1998 or 1999. During this two-year period, 51 programs were continued with minor improvements; nine programs were significantly modified; four programs were discontinued, and five programs were scheduled for further review.



**Program Need.** In Illinois, it is expected that there will be a large number of job openings each year as executives and managers leave the labor force. Growth in the number of new positions created each year will be slower than average and will be highly dependent upon the sector of business and level of management in which the worker is employed. Increased automation and the transfer of decision-making to lower level or traditionally blue collar workers also will affect demand. (*Horizons, 1999.*) Community college graduates likely will face competition from bachelors and masters degree graduates for these positions.

Statewide, the pattern of enrollments between fiscal year 1996 and fiscal year 1998 shows that the number of students enrolling in related programs decreased 9 percent, while the number of graduates remained stable. Individual college reports on enrollments varied. For example, McHenry County College reported rising enrollments in its Business Management Program, which has been accredited for ten years by the Association of Collegiate Business Schools and Programs (ACBSP). The college reports a strong demand for individuals with management skills. College of Lake County noted a decrease in program enrollment resulting from the availability of local employment opportunities that did not require a degree and the number of students choosing transferable degrees with an emphasis in business. In addition, according to a CLC student survey, 47 percent were enrolled in the Business Management/Supervision program for career advancement purposes. Parkland College noted a trend for new retail outlets to fill management positions by individuals brought in from other locations and offer sales positions to local residents, resulting in a decrease in the number of students seeking management training, and an increase in students seeking training in sales. Lewis & Clark Community College noted a slow decrease in enrollments over the past five years, attributing this to the tendency to eliminate supervisory positions and other lower to middle management positions.

**Program Cost.** Colleges' reports indicated that costs were in line and appropriate with the state average. One institution mentioned that higher than average costs sometimes occur because of small class sizes, yet this occurrence generally is offset by students taking common courses that are required in a variety of business programs at any one institution.

**Program Quality.** Program strengths and quality recommendations were numerous. As in other occupational programs, colleges frequently described plans to increase the use of the Internet in class assignments. Five colleges mentioned utilizing or adding internship programs. McHenry County College will consider adding a certificate program; stress career opportunities in management with guidance counselors; increase the number of AAS completions in business management; address articulation with four-year universities; and formulate an action plan concerning identified program weaknesses with the assistance of the management advisory committee. Belleville Area College will address the needs of adjunct faculty by developing a teaching guide, supplying each with a compilation of curricular resources, and more closely monitoring their course outlines. In addition, the College will develop a capstone course, identify and use more computer-based management simulations, and review and update library holdings. College of Lake County faculty will stress communication skills, problem-solving skills, knowledge of group processes, and computer literacy in instruction. Colleges including Sauk Valley, Kishwaukee, Illinois Valley, and Kaskaskia will increase the emphasis on international business. Kishwaukee College also will require the use of multimedia in class presentations to simulate the corporate environment. A Kishwaukee instructor who was given released time to write the college's

marketing plan, incorporated the methodology she used to develop the plan in her Intro to Marketing course. She then created classroom activities that enabled students to participate in the planning of marketing several college activities, such as the career fair. Illinois Central College added an introduction to business careers and job orientation class to its curricula. Students have the opportunity to hear speakers from many business-related careers and complete a self-analysis in the first course and practice team work, prepare resumes and practice interviewing skills in the second course. William Rainey Harper College is one of the few schools nationwide to operate a private business by students within their supervisory and administrative management program. Wilbur Wright College implemented a competency-based exit testing to ensure similar quality results across multiple sections of the same classes.

After Parkland College concluded its program review in 1995, the Logistics and Materials Management program was transferred to the Engineering Science and Technology Department to complement the manufacturing technology program. The program is operated in conjunction with the American Production and Inventory Control Society (APICS). Beginning in fiscal year 1999, this program will be officially part of the industrial technology program area including manufacturing technology, electronics, CAD and materials management. Heartland Community College indicates strong support for its materials and logistics management program as evidenced by the requests for employee training made by area companies. Heartland will consider blending this curricula with its manufacturing program.

#### **Administrative Assistant/Secretarial Services (including Medical and Legal Secretaries)**

<b>Number of colleges offering training</b>	<b>45</b>
<b>Program cost</b>	<b>Moderately high</b>
<b>Job outlook</b>	<b>Moderate to active growth</b>
<b>Percent of 1998 follow-up respondents employed or continuing education</b>	<b>91 percent</b>
<b>Percent of 1998 follow-up respondents working full-time</b>	<b>83 percent</b>
<b>Percent of 1998 employed follow-up respondents working in a related job</b>	<b>77 percent</b>

Programs included in this category were reviewed in fiscal years 1998 or 1999. During this two-year period, 179 programs were continued with minor improvements; 8 programs were significantly modified; 17 programs were discontinued, and 23 programs were scheduled for further review.

*Program Need. Horizons (1999)* indicates that there is a slight shortage of office managers in Illinois while the outlook for general secretaries, medical and legal secretaries is balanced. Both "clerical supervisors and managers" and secretaries are among the 50 occupations expected to have the greatest number of job openings each year, and faster than average employment growth is expected for medical and legal secretaries. Individuals with computer programming skills and knowledge of software packages will have an advantage in the job market.

The pattern of enrollments between fiscal years 1995 and 1997 shows that the number of students enrolling in related programs decreased 4 percent, while the number of graduates increased 20 percent. One college theorized that declining enrollment may be due to low salaries in the district and a decreased emphasis on office occupational programs in district high schools. The 1997

*Follow-up Study of Fiscal Year 1996 Occupational Program Graduates (ICCB)* confirms that salaries were lower for this occupational group than many of the others examined that year. Several colleges reported that they will target high schools for recruitment purposes while others reported good articulation with high schools including formal agreements and offering credit through proficiency testing. A unique recruiting effort was mentioned in Rend Lake College's report. Each year, the College hosts an Office Technology Information Systems (OTIS) competition event for area high school business students. The event includes information and a tour of the campus, but the primary focus is a national exam on general business vocabulary, keyboarding, word processing and other related topics. Students with the highest overall score from each high school receive a tuition free scholarship for one year.

Despite the increase in program graduates, colleges reported that many students enroll simply to take a course, rather than to seek a degree. Often, students are already employed or they obtain employment prior to finishing a degree because of a favorable job market. Since students are eager to pick up new skills to gain employment, respond to changes in the workplace, or seek a promotion, many colleges offer fast track programs in less than the normal 16 week semester format. Kankakee Community College notes a large number of students returning to improve skills and Lewis and Clark Community College notes gains of 200 percent from fiscal years 1998 to 1999 for students with similar goals. Prairie State College reports that students select courses of interest, particularly those involving computers, and do not enroll in other courses required to earn a degree. Both Prairie State College and Richland Community College hope to encourage retention and degree completion by providing students with a schedule of courses covering several semesters so they can plan accordingly.

**Program Cost.** Colleges generally indicated that program costs were in line with the state average, attributing slightly higher costs to technology upgrades or senior faculty salaries, for example, and lower costs to the use of part-time faculty or increasing enrollments.

**Program Quality.** Time and again, colleges indicated that the pace of technology poses several challenges including the need for faculty to keep their skills current, the need for classrooms to have up-to-date equipment and software, and the need for courses and curricula to be continually revised to mirror what occurs in the workplace. Ten colleges reported on faculty development activities including workshops, seminars, and national conferences. Parkland College faculty completed Vocational Internship Programs to see first-hand the needs of employers and worksites in their district.

To update programs, colleges added courses, reassigned programs, developed plans to systematically replace equipment hardware and software, and renamed programs as evidence of an increased emphasis on technology. South Suburban College conducts an annual review of the needs of business and industry based on research gathered from student and employer evaluations and a survey of want ads to assist in course and curriculum revision and update software as needed. Numerous other institutions cited similar efforts. College of DuPage incorporated instruction in e-mail usage, Internet searches, desktop publishing, web page construction and Internet business correspondence into its curriculum. McHenry County College will create a joint project between Office Systems Technology and Computer Information Systems faculty to begin establishing a basis for a possible merger of the two areas into an umbrella information systems curriculum within 2-3

years. John Wood Community College moved its Associate in Applied Science degree and certificate to its computer science department and Lincoln Land Community College will consider a similar transfer. Elgin Community College placed all computer courses under the instructional dean for Business and Professional Development and developed a marketing brochure that combines course offerings for all credit and non-credit computer courses. In an effort to keep aware of local needs and integrate workforce initiatives into credit and non-credit areas at Kankakee Community College, the Office of Corporate and Continuing Education and the Business Division employed two faculty to each teach degree and continuing education courses and deliver customized training to local businesses and industries.

Thirteen colleges mentioned the critical role of advisory committees. Members often represent area businesses or industries and provide perspectives on the type of training students need, serve as guest speakers in classes, and may offer internship experiences and job opportunities to graduates. College of Lake County reports its advisory committee members recommended curriculum development continue in web programming, operating systems, data management/warehousing and advanced object-oriented programming. Richland Community College reports that its advisory committee has been "emphatic" about the need for workers to be proficient in the SCANS competencies of productively using resources, interpersonal skills, information, systems, and technology. Relatedly, Kankakee Community College, Lewis & Clark Community College, and Parkland College are integrating skills standards set by the Illinois Occupational Skills Standards Credentialing Council into curricula. Illinois Valley Community College added courses in basic grammar to its certificate and College of Lake County reports that enforcement of course prerequisites has had positive effects in helping students be better prepared for future courses.

Several institutions addressed the need for career development, worksite experiences, and job search skills to give students a better understanding of careers and jobs. South Suburban College has a one-hour seminar class in which a discussion of labor market supply and demand takes place. This course also includes resume preparation and general workplace skills such as teamwork and interpersonal relationships. Shawnee College requires a 150-hour internship for students in its medical office assistant program. At Parkland, students complete a portfolio that they can use to demonstrate their skills to potential employers prior to taking internship/seminar courses. Moraine Valley Community College plans to strengthen its focus on job placement. Danville Area Community College hosts a job search seminar to aid students in developing resumes and perfecting interview skills.

Program reviews helped some other colleges determine what skills students are lacking. In its Legal Administrative Assistant/Secretary program, Parkland College will consider a capstone course that integrates word processing spreadsheet application, database and presentation software, and in its Medical Administrative Assistant/Secretary program, the College will increase the emphasis on medical terms, address students' need to increase typing speed, and develop a new office simulation capstone course. At Morton College, the Medical Office Assistant program will be joined with a required Nurse Assistant Training component to better qualify students for a greater variety of medical office jobs. Illinois Central College will add an Intro to Pharmacology class to its Medical Office Assistant program.



Accreditation or affiliation with professional associations/organizations can be a plus for programs. At Illinois Central, the information processing management certificate prepares students for the Certified Professional Secretary designation. Morton College will consider a professional licensing course or exam to validate the success of students completing the administrative assistant/administrative secretary program. William Rainey Harper College's program is accredited by the Association of Collegiate Business Schools and Programs (ACBSP). Certified professional secretary classes have been offered through interactive video/distance learning at corporate and college sites. Belleville Area College listed accreditation as one of the strengths of its certificates and degrees in this program area. Elgin Community College has an Office Administration and Technology Student Association that has strong student participation, provides leadership development opportunities, and promotes student retention.

**Recommendation.** A special focus area of the fiscal year 1998 Accountability/Program Review Report was the need for short-term certificates. Colleges were asked to examine occupational programs with low completion rates to determine if one or more short, targeted certificates would better meet student educational goals, based on coursetaking behavior and other pertinent factors, including the willingness of employers to hire students before program completion. The college reports indicated that the need for additional short-term certificates was indicated in a number of occupational areas, including Computer Information Technologies and Office Technologies, Manufacturing and Production Technologies, Allied Health, and Automotive Repair. In their fiscal year 1999 program review reports, summarized above, colleges consistently identified the growing need to offer occupational instruction in short, focused programs to meet student and employer demand for very specific skill sets. In addition, many students who seek occupational training under the Workforce Investment Act will be seeking short-term programs that can lead to immediate entry-level employment. Many colleges will be looking at occupational programs that lend themselves to the creation of a number of focused, short-term certificates that can build to a larger certificate or degree, where appropriate. In order to allow colleges a sufficient amount of flexibility to address this need, **it is recommended that the ICCB should develop a process to simplify and accelerate the review and approval of requests for new short-term certificates of less than 30 semester credit hours, in order to serve the increasing number of students that desire short, focused instruction to acquire specific skills needed in the workplace.**

### State-Level Initiatives

During fiscal year 1999, a variety of initiatives were undertaken by the ICCB to strengthen accountability, provide enhanced service, and increase productivity. Summaries of several activities are presented below.

**System Funding Initiatives.** The ICCB has made an effort to expand "block grants" to the system as part of an ongoing initiative to decouple at least a portion of state funding from credit enrollments to support areas that are critical to accomplishing the community college mission. There are three categories of Workforce Preparation Grants: Business/Industry, Education-to-Careers, and Welfare-to-Work. For fiscal year 2000, a total of nearly \$13.75 million was appropriated to support these three grant categories. Special Population Grants and Advanced Technology Grants support



numerous efforts by the colleges to increase access and diversity. For fiscal year 2000, \$12.7 million was allocated to support Special Population Grants and nearly \$13.2 million was allocated to Advanced Technology Grants. The fiscal year 2000 budget also includes a new Special Initiative Grant category. Of the \$500,000 appropriated to support this category, ICCB will direct \$300,000 to support initiatives that address the shortage of individuals who are prepared to work in the field of information technology, a critical need for the present and future economy. Annual Equalization Grants are the result of a system funding initiative that attempts to reduce the disparity among districts in local property tax available per student.

**Performance-Based Incentive System.** In fiscal year 1999, the ICCB implemented a Performance Based Incentive System as a practical, effective way of assuring continuing educational improvement at Illinois community colleges. In addition to statewide goals and measures, the system includes a district-specific measure that recognizes the autonomy, mission differentiation, and community needs of the individual colleges. Colleges may develop district-based goals and measures in the area of Workforce, Technology, or Responsiveness to Local Needs.

**Workforce Preparation Awards.** The ICCB annually presents Workforce Preparation Awards to up to three colleges in recognition of outstanding efforts to improve employment opportunities and provide for a better trained workforce in their communities. Most recent award winners are: College of Lake County/Elgin Community College/McHenry County College/William Rainey Harper College for a partnership with Motorola Corporation to develop the Electronic Manufacturing Program to alleviate the shortage of trained electronics technicians in the region, Lewis & Clark Community College for its alliance with the Olin Corporation, and Waubensee Community College for a partnership with SealMaster Bearings.

**Implementation of Workforce Legislation.** Provisions of the Workforce Investment Act (WIA) need to be implemented by the beginning of fiscal year 2001. A great deal of work remains to be done between now and then. ICCB staff will dedicate time to support the activities of the Illinois Workforce Investment Board and related committees to develop and implement unified guidelines and procedures that will allow implementation of WIA efficiently and effectively. In addition, ICCB staff will provide ongoing information and technical assistance to Illinois community colleges regarding their roles and responsibilities in the implementation of WIA.

**Hire Education Alliance.** The Hire Education Alliance is a systems approach to making the vast array of programs and services offered at Illinois community colleges accessible through a single point of contact through a toll free hotline number at the ICCB, and similar gateways within each college. The Alliance provides guiding principles and characteristics and a strategic process to enable colleges to reach the end goal of easy access to effective services that meet workforce development needs.

**Advancing Opportunities Program.** The Advancing Opportunities Program grew out of the Opportunities Program that began as a welfare-to-work partnership among the ICCB, Department of Human Services, and 15 community colleges. The Advancing Opportunities program is now located at 36 Illinois community colleges and one community college center. The program answers the need to move Temporary Assistance to Needy Families (TANF) clients out of entry-level jobs and continued public assistance into workplace advancement and self-sufficiency.

**Occupational Skills Standards.** Working cooperatively with the Illinois State Board of Education to provide statewide leadership for the Occupational Skills Standards initiative, a portion of funds appropriated to the ICCB in fiscal year 1998 to support the development of occupational skills standards was directed to grants to projects to support the development of replicable models for the implementation of occupational skills standards within curricula, assessment, and accountability policies and procedures. Models developed by Belleville Area College, City Colleges of Chicago (Richard J. Daley College, West Side Technical Institute, Humbolt Park Vocational Education Center, Dawson Technical Institute), Illinois Eastern Community Colleges, Kankakee Community College/Heartland Community College, Kishwaukee College, McHenry County College, and Richland Community College were disseminated at a statewide conference. The models have also been made available to a broad audience by ICCB and Illinois State Board of Education staff.

**Policies to Improve Responsiveness.** Staff from the ICCB and the IBHE worked together during fiscal year 1998 to develop modifications to program approval processes that would eliminate unnecessary duplication and streamline the process to maximize the colleges' ability to respond quickly to the needs of business and industry. The IBHE delegated to the ICCB sole responsibility for approval of certificate programs and for temporary approval of Associate of Applied Science Degree programs that address emerging occupations or an immediate and temporary need in the community. During fiscal year 1999, staff have implemented these and other procedural changes in the approval process to reduce the amount of time required to review new program requests. Further modifications are being considered for the approval of short-term certificates.

**Illinois P-16 Partnership for Educational Excellence.** The ICCB is a full and supportive partner along with the Illinois State Board of Education and the Illinois Board of Higher Education in the Illinois P-16 Partnership for Educational Excellence. Through the partnership, the three agencies acknowledge their shared responsibility for the educational continuum in Illinois. Priority areas identified for immediate attention include smoothing the transition from high school to college or the workplace (College-Ready Kids); improving the recruitment, preparation and development of classroom teachers (Classroom-Ready Teachers); and expanding the use of technology to improve educational opportunities (Log-On Learning).

**Education-to-Careers.** Education-to-Careers is an initiative to promote the overall career preparation opportunities that schools can provide students for success in education, in work, and in life. The ICCB, as the state coordinating board for Illinois community colleges, plays a pivotal role in Education-to-Careers (ETC) as an equal partner in administering and implementing ETC as an education reform initiative through joint administration with the interagency state-level team and system leadership and coordination within the community college system.

**Illinois Articulation Initiative.** The Illinois Articulation Initiative (IAI) is a joint initiative of the Illinois Board of Higher Education, ICCB, and the Transfer Coordinators of Illinois Colleges and Universities for the purpose of enhancing the transfer process for the more than 30,000 students that transfer each year among all sectors of higher education in Illinois. The Illinois community colleges are the primary providers of the freshman and sophomore year of postsecondary education in Illinois public higher education, and the ICCB and its staff have provided leadership and support to the IAI since its inception in January 1993. In addition, community college faculty and staff serve on IAI

panels that developed specific recommendations for courses that will be part of the initiative. To date, recommendations have been accepted for a common general education core and 24 majors.

**Teaching Learning Conference.** The Illinois Community College Faculty Association supports an annual Teaching Learning Conference that brings together faculty and staff from colleges throughout the state to share best practices and collectively discuss issues affecting teaching and learning.

**Learning-Centered Awards.** This ICCB award recognizes innovation in approaching the challenges of fostering an excellent learning environment. The award is presented to up to three colleges annually. Most recent winners are: Richard J. Daley College for Centrifugal Learning: A New Paradigm for Faculty and Technology, Lewis & Clark Community College for Delivering Career Services Online, and Moraine Valley Community College for The Learning Challenge Grant Program.

**Study of Remedial/Developmental Education.** Community colleges in Illinois annually serve over 85 percent of the students who enroll in remedial/developmental coursework at in-state public higher education institutions. During fiscal year 1998, ICCB staff conducted a two-part study in collaboration with IBHE staff that examined the scope, cost, structure, outcomes, and policies related to remedial/developmental education at Illinois community colleges. The study provided evidence that a cohort of students who completed remediation at community colleges performed and persisted in college at levels equal to or higher than students who did not require remediation. It also identified the need to improve mechanisms for identifying and tracking students who require remediation. In addition, ICCB and IBHE staff jointly developed implementation strategies aimed at increasing the effectiveness of existing policies on remedial/developmental education. Colleges were asked to examine some of the issues identified in the study and report in the 1998 ICCB PQP/Program Review Report. A fellow working with the Center for Policy Development will address the policy implications of these issues during fiscal year 2000.

**Center for Policy Development.** The Center for Policy Development was established to provide the opportunity for community college faculty and staff to bring their expertise to issues of critical importance to community colleges and to develop appropriate policy recommendations. Each year, two issues will be identified and Policy Fellows will be selected to address them. During fiscal year 1999, the first Policy Fellow worked with representatives from throughout the community college system and with the Illinois Student Assistance Commission to develop recommendations for initiatives to increase the amount of assistance available to community college students. A final report of this policy study will be presented to the ICCB at its September 1999 meeting.

**Illinois Incentive for Access.** The Illinois Incentive for Access (IIA) program is designed to direct additional grant aid to students classified as freshmen with no family resources to pay for college. It is a need-based program which provides a one-time \$500 award to freshmen applicants who have no financial resources for college. Community college students represent a large portion of the students who receive financial assistance through IIA, and the Illinois community college system strongly supports the program.

**Illinois Student Assistance Commission Pilot of Assistance for Less-than-Half-Time Students.** During fiscal year 2000, the Illinois Student Assistance Commission will pilot a program to provide financial assistance to students who are enrolled at higher education institutions less than half-time. These students have not been eligible to participate in the Monetary Award Program (MAP) in the past. Many community college students enroll less than half-time due to full-time work and/or family commitments or other circumstances and would benefit from this initiative. The ICCB is fully supportive of this initiative, and a number of community colleges are participants in the pilot.

**Illinois Video Education Network.** The ICCB and the Illinois Board of Higher Education have worked as partners on the development of the Illinois Video Education Network. Interactive video sites around the state bring new learning opportunities to students while reducing travel costs for them as well as for faculty and staff. Ten regional consortia across the state link sites at community colleges, public universities, independent higher education institutions, business extension sites, hospitals, high schools, and libraries.

**Illinois Virtual Campus.** Community colleges will be access points for the new Illinois Virtual Campus that makes Internet-based courses from institutions throughout the state available through a single point of contact. The colleges will also provide student support services for individuals who use the Virtual Campus.

**The Virtual Community College.** This ICCB initiative, under the leadership of a fellow of the Center for Policy Development, addresses issues of distance by community colleges from a statewide perspective, especially Internet delivery. The issues are currently under discussion by a steering committee of representatives from the entire community college system.

**Lincoln's Challenge.** The ICCB's Lincoln's Challenge Scholarship Program operates with an annual appropriation to provide scholarships for Lincoln's Challenge graduates. The Lincoln's Challenge Program is sponsored by the Illinois National Guard to help at-risk high school dropouts to attain their GED. The ICCB scholarships give students an opportunity to continue their education at an Illinois community college. To date, 814 students have received scholarship awards.

**East St. Louis Community College Center.** During fiscal year 1999, the ICCB took the unprecedented action of dissolving the Metropolitan Community College District. Subsequently, the ICCB worked with the community college system and other institutions of higher education to create the East St. Louis Community College Center to bring a quality community college experience to the citizens of the former district. Under the general administration of the Southern Illinois Collegiate Common Market, an educational consortium that includes John A. Logan College, Rend Lake College, Shawnee Community College, Southeastern Illinois College, and Southern Illinois University (Carbondale and Edwardsville), the Center opened to students in January 1999. Courses, programs and services are offered at the Center by a number of community colleges.

**Occupational Follow-Up Study.** Illinois community colleges annually conduct an occupational follow-up survey of graduates of occupational programs that are scheduled for review the following year. The results of the survey are compiled and analyzed in the annual ICCB Occupational Follow-Up Study, which provides valuable information on student employment outcomes and satisfaction with programs and services for use during the program reviews that are conducted the subsequent



year. Information from the Follow-Up Survey also provides information for the Performance Based Incentive System.

**Program Approval.** New programs are reviewed by ICCB staff, in collaboration with staff from the Illinois State Board of Education and the Illinois Board of Higher Education. Program approval is based on evidence of quality, need, and cost-effectiveness. Policies and procedures have been revised during fiscal year 1998 to streamline the program approval process while maintaining quality assurance.

**Leadership and Core Values.** The Leadership and Core Values initiative was approved by the ICCB in 1997 and has been implemented throughout the Illinois community college system. The initiative has three main objectives: 1) to define and describe core values that are held in high esteem among Illinois' populations, 2) to explore and implement strategies that enable Illinois community colleges to create a culture and climate characterized by agreed-upon values, and 3) to develop strategies for infusing these values into the curriculum and operations, into the teaching, and into leadership at Illinois community colleges. During fiscal year 1999, ICCB received an appropriation to implement the initiative and awarded grants totaling \$105,000 to 39 colleges to begin work on Leadership and Core Values. Grants will be made to colleges to continue the initiative during fiscal year 2000.

**Accountability Awards.** ICCB Awards for Excellence in Planning and Accountability are presented annually to up to three colleges in recognition of outstanding efforts in these areas. The most recent awards were given to Black Hawk College, Highland Community College, and Prairie State College in recognition of initiatives to strengthen linkages and integrate planning, budgeting, program approval, and program review around college priorities.

**Uniform Financial Reporting System.** The Uniform Financial Reporting System (UFRS) is a major ICCB initiative to provide the system with a comprehensive financial database. UFRS is operational with audited data by colleges currently accessible on the ICCB homepage. UFRS provides another tool for use in performing financial reviews and analysis of revenues, expenditures, assets, liabilities, and fund balances at the individual college level. Additional analysis can be performed by college officials who have the capability of creating real time customized queries of the databases.

**Recognition.** The ICCB reviews the recognition status of colleges on a five-year cycle. A streamlined revised recognition process is being implemented to take advantage of the substantial amounts of information the colleges provide to the ICCB on a routine basis and rely less on information gathered through on-site visits to college campuses. Financial audit visits will be decoupled from the recognition process but audit results will remain a part of the process. Evaluations will be broadened to include quality indicators in addition to compliance standards.

**Educational Guarantees.** Nearly all Illinois community colleges offer their students educational guarantees. Baccalaureate transfer guarantees ensure that community college transfer students can transfer all of their courses to their chosen four-year college or university. If courses selected with the assistance of the community college do not transfer, the community college will refund the tuition. The subsequent adoption of the statewide general education common core and major panel



recommendations through the Illinois Articulation Initiative have greatly facilitated the implementation of transfer guarantees. Occupational program guarantees ensure that graduates of community colleges' career and technical programs have the skills needed in today's labor market. Graduates may re-enroll in appropriate courses at no charge if they did not obtain the skills the program is designed to teach.

**ICCB Databases and Related Reports.** ICCB has developed a comprehensive Management Information System and maintains large databases of information about students, faculty, curricula, fiscal matters, etc. ICCB staff use this information to produce regular reports on enrollments and completions, student transfer, faculty salary, unit costs, and others that provide statewide accountability as well as valuable information for the colleges to use.

**Strategic Planning Initiative for the Next Decade.** In January 1994, *VISION 2000, Charting a Course for the Future* was put in place to serve as the focus of initiatives for the system and the ICCB through the remainder of the 20<sup>th</sup> Century. As the 21<sup>st</sup> Century approaches, the system has launched a major planning initiative to develop a forward-looking strategic plan that will provide a focus for the system for the first decade of the new millennium. The plan will be developed with input from all community college constituency groups and the ICCB and will be implemented for fiscal year 2001.

### Summary and Conclusions

This report highlights and summarizes accountability activities and initiatives submitted by Illinois' 48 community colleges in their *Accountability/Program Review Reports*. Beginning with the fiscal year 1994 report, the Illinois Community College Board has combined its annual report on program review with responses to the Illinois Board of Higher Education's (IBHE) Priorities, Quality, and Productivity (PQP) initiative to emphasize that program review and PQP are parallel initiatives with the common goal of assuring that the programs and services offered by the colleges are high-quality, cost-effective, and support the mission and priorities of each institution. In February 1999, IBHE introduced *The Illinois Commitment: Partnerships, Opportunities, and Excellence*, a broad-based initiative that identifies six statewide goals for higher education in Illinois that include and go beyond the elements of PQP. Illinois colleges and universities were asked to respond to the Illinois Commitment in an annual Results Report that will replace the PQP Report. College responses are summarized in the first annual *Illinois Community College System Results Report*, which was issued as a separate document in September 1999.

The three primary sections of this report include **Accountability Special Focus Areas, Analyses of the Results of Fiscal Year 1999 College Program Reviews, and State-Level Initiatives**. Topics considered in the Accountability Special Focus section this year include College Priorities, Performance-Based Incentives – District-Based Goal, and Public Service Offerings. Programs in five academic disciplines, adult and developmental education and English as a Second Language, and 25 occupational/vocational programs areas are examined in the Results of Fiscal Year 1999 College Accountability/Program Review. The State-Level Initiatives section briefly highlights initiatives undertaken at the state level to promote accountability, quality, and productivity. Highlights of the findings of the report follow:

## **Accountability Special Focus Areas:**

### ***College Priorities***

- Colleges continued to identify priorities in the areas of teaching/learning, student access and success, services, workforce preparation, diversity, community building, communication, leadership, resources, and technology.
- College goals and priorities are closely aligned with those expressed by the Illinois Community College Board and the Illinois Board of Higher Education.

### ***Performance-Based Incentives – District-Based Goal***

- The ICCB performance-based funding pilot project is entering its second year. The pilot model is a two-tier model that includes (1) measures that reflect statewide goals for community colleges and (2) district-specific measures in three goal areas that reflect autonomy, mission differentiation, and community needs.
- Ten college districts have chosen to work in the area of responsiveness to local needs, 21 districts chose the area of technology, and eight districts and one college from Chicago City Colleges chose the area of workforce.
- Peer Review Panels are currently evaluating the college reports of progress made toward district-based goals during fiscal year 1999. The panels expect to complete recommendations for fiscal year 2000 funding related to the district-based goals by the end of November 1999.

### ***Public Service Offerings***

The public service function was selected as an area of focus for fiscal year 1999 primarily because it was the first year colleges were asked to report individual student/unit record data for students enrolled in noncredit, nonreimbursable courses. This data collection is an attempt to quantify the scope of such activities more concisely than has been done in the past. Colleges provided extensive information related to their public service activities. Highlights follow:

- Nearly every college indicated that public service offerings are intended to promote lifelong learning in the college district. Areas of particular emphasis for new or expanded public service programs appear to target groups at the ends of the spectrum – youth and senior citizens.
- In general, public service courses are designed to be self-supporting through required fees paid either by individuals or by a company. Public service activities (i.e., cultural events, community-interest workshops/seminars) are generally not self-supporting. Colleges underwrite these activities as a part of their commitment to reach out to and enrich the surrounding communities.

- The majority of colleges that reported difficulty processing data for noncredit course enrollments also indicated that they plan to acquire new software and/or data systems that will make data collection a more integrated process.
- Most colleges reported offering more noncredit courses than activities. However, due to the one-time, large audience nature of many noncredit activities (i.e., concerts or plays), they typically involve higher total participation than noncredit courses.
- Nineteen colleges reported a shift from credit to noncredit courses over the last five years. A key factor in this shift is increased demand from individuals and employers for specific, short-term training offered in a flexible format, particularly in the area of computer training.
- Ten colleges reported a shift from noncredit to credit courses over the last five years, largely due to a growing need for accountability for workforce development programs, particularly in business and industry training and welfare to work.
- There does appear to be a middle ground between the forces that mitigate for increasing noncredit courses and those that favor increasing credit courses. Several colleges reported that rather than shifting to credit or noncredit, the two areas have worked together to develop a combined product that provides the user a choice of credit or noncredit. The resulting courses are co-listed as credit and noncredit, and the student elects which to pursue.

### *Instructional Program Review*

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 1999, colleges reviewed a total of 137 academic disciplines, 38 adult and development and English as a Second Language programs, and 692 occupational programs.
- Findings of the reviews of academic disciplines indicated adequate need and cost-effectiveness. Quality enhancements included expanded use of technology for course delivery, instructional support, and communication between students and faculty.
- Reviews of adult and developmental education and English as a Second Language programs indicated strong need and cost-effectiveness. Colleges view these programs as necessary to provide these populations with education and services to enable them to be productive members of society.
- As a result of reviews of occupational programs, 591 programs were continued with minor improvements, 19 programs were significantly modified, 32 programs were scheduled for further review during fiscal year 2000, and 50 programs were identified for elimination.
- Low completion rates in occupational programs were a common concern among the colleges. Nearly every college indicated that increasing numbers of students take courses to acquire

specific skill sets rather than to complete a program, and that employers are increasingly demanding short-term, focused training for employees.

**Recommendations.** As a result of findings in the report of *Accountability and Productivity in Illinois Community Colleges Fiscal Year 1999*, the following is recommended:

- Colleges should continue efforts to ensure that collection of data for students enrolled in noncredit courses can be fully captured and reported to the ICCB in order to more fully document the scope of the colleges' service to the citizens of Illinois.
- Colleges should explore strategies, such as co-listed courses and others, to accommodate the varying needs of students for credit and noncredit instruction, particularly in occupational areas that are dependent on constantly changing technology (i.e., computers, manufacturing technologies).
- The ICCB should develop a process to simplify and accelerate the review and approval of requests for new short-term certificates of less than 30 semester credit hours, in order to serve the increasing number of students that desire short, focused instruction to acquire specific skills needed in the workplace.

**Conclusion.** 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. This report illustrates that the colleges are committed to the continuous improvement of their programs and services and that they have in place strategic planning processes to address future needs.

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 1999			
College	# of Occupational Curricula Reviewed	# of Academic Disciplines Reviewed	# of Dev/Adult Education Programs Reviewed
Belleville	40	5	1
Black Hawk	41	2	0
Chicago			
Daley	17	1	3
Kennedy-King	19	1	1
Malcolm X	6	7	1
Olive-Harvey	5	0	1
Truman	6	2	0
Washington	7	6	1
Wright	13	2	0
Danville	11	1	1
DuPage	40	4	3
Elgin	20	3	3
Harper	13	4	0
Heartland	6	5	1
Highland	11	1	7
IL Central	20	1	0
Illinois Eastern			
Frontier	2	0	0
Lincoln Trail	10	0	0
Olney	3	0	0
Wabash	3	0	0
IL Valley	9	7	0
Joliet	6	10	0
Kankakee	22	0	0
Kaskaskia	8	0	0
Kishwaukee	11	0	0

Illinois Community College Board Table A-1 LIST OF PROGRAMS REVIEWED BY COMMUNITY COLLEGES DURING FISCAL YEAR 1999			
College	# of Occupational Curricula Reviewed	# of Academic Disciplines Reviewed	# of Dev/Adult Education Programs Reviewed
Lake County	37	1	0
Lake Land	13	3	3
Lewis & Clark	21	1	1
Lincoln Land	16	8	0
Logan	7	6	0
McHenry	14	3	0
Moraine Valley	19	3	0
Morton	7	3	0
Oakton	20	6	0
Parkland	5	3	2
Prairie State	23	6	0
Rend Lake	9	1	2
Richland	8	1	0
Rock Valley	NR	1	1
Sandburg	10	1	0
Sauk Valley	13	2	2
Shawnee	5	4	0
South Suburban	20	0	0
Southeastern	6	4	0
Spoon River	8	2	0
Triton	43	6	0
Waubonsee	32	7	1
Wood	7	3	3
<b>TOTALS</b>	<b>692</b>	<b>137</b>	<b>38</b>

Illinois Community College Board  
Table A-2  
SUMMARY OF FISCAL YEAR 1999 REVIEWS OF  
OCCUPATIONAL PROGRAMS BY COLLEGE

College	Number of Programs Reviewed	Number Continued with Minor Improvements	Number Significantly Modified	Number Scheduled for Further Review	Number Identified for Elimination
Belleville	40	31	4	1	4
Black Hawk	41	22	0	0	19
Chicago					
Daley	17	9	0	8	0
Kennedy-King	19	14	1	0	4
Malcolm X	6	6	0	0	0
Olive-Harvey	5	5	0	0	0
Truman	6	5	1	0	0
Washington	7	5	1	0	1
Wright	13	12	0	0	1
Danville	11	10	0	0	1
DuPage	40	39	1	0	0
Elgin	20	20	0	0	0
Harper	13	13	0	0	0
Heartland	6	4	2	0	0
Highland	11	10	0	0	1
Illinois Central	20	17	3	0	0
Illinois Eastern					
Frontier	2	2	0	0	0
Lincoln Trail	10	8	0	0	2
Olney	3	2	0	1	0
Wabash Valley	3	2	0	0	1
Illinois Valley	9	9	0	0	0
Joliet	6	6	0	0	0
Kankakee	22	20	2	0	0
Kaskaskia	8	8	0	0	0
Kishwaukee	11	10	0	0	1
Lake County	37	35	0	0	2

Illinois Community College Board  
Table A-2  
SUMMARY OF FISCAL YEAR 1999 REVIEWS OF  
OCCUPATIONAL PROGRAMS BY COLLEGE

College	Number of Programs Reviewed	Number Continued with Minor Improvements	Number Significantly Modified	Number Scheduled for Further Review	Number Identified for Elimination
Lake Land	13	13	0	0	0
Lewis & Clark	21	21	0	0	0
Lincoln Land	16	14	0	0	2
Logan	7	7	0	0	0
McHenry	14	2	0	12	0
Moraine Valley	19	17	0	2	0
Morton	7	7	0	0	0
Oakton	20	20	0	0	0
Parkland	5	5	0	0	0
Prairie State	23	19	2	2	0
Rend Lake	9	9	0	0	0
Richland	8	7	0	0	1
Rock Valley	NR	NR	NR	NR	NR
Sandburg	10	9	0	1	0
Sauk Valley	13	12	0	1	0
Shawnee	5	3	0	1	1
South Suburban	20	18	0	2	0
Southeastern	6	4	0	0	2
Spoon River	8	2	0	0	6
Triton	43	42	0	1	0
Waubonsee	32	31	0	0	1
Wood	7	5	2	0	0
TOTALS	692	591	19	32	50

Illinois Community College Board  
Table A-3  
OCCUPATIONAL PROGRAMS ELIMINATED THROUGH PROGRAM REVIEW  
IN FISCAL YEAR 1999

District/College	Program Title	CIP
Belleville	Power Plant Welding Certificate	480508
	Power Plant Welding Certificate	480508
	Industrial Blacksmith AAS	480502
	Industrial Blacksmith Certificate	480502
Black Hawk	Apprentice Ironworker Certificate	480501
	Apprentice Die Sinking Certificate	480507
	Apprentice Engineering Draftsman Certificate	4801
	Die Design AAS	4801
	Die Design Certificate	4801
	Drafting Certificate	4801
	Tool Design AAS	4801
	Tool Design Certificate	4801
	Banking and Finance Certificate	5208
	Apprentice Heating, Ventilating & Air-Conditioning Certificate	4702
	Apprentice Millwright Certificate	480503
	Medical/Clinical Lab Tech AAS	511004
	Mechanical Technology Design AAS	150805
	Numerical Control Certificate	480520
Chicago-Kennedy-King	Apprentice Pipefitter Certificate	4605
	Apprentice Plumber Certificate	4605
	Surveying Certificate	151102
	Welding Technology AAS	480508
	Commercial Art AAS	500401
Chicago-Harold Washington	Commercial Art Certificate	500401
	Communication Arts, Photography Certificate	500406
	Machinist Certificate	480503
	Finance and Credit AAS	520803
Chicago-Wilbur Wright	Communication Arts-Photography Certificate	500406
Highland	Stenographer Receptionist Certificate	520401



Illinois Community College Board  
Table A-3  
OCCUPATIONAL PROGRAMS ELIMINATED THROUGH PROGRAM REVIEW  
IN FISCAL YEAR 1999

District/College	Program Title	CIP
IECC-Lincoln Trail	Banking and Finance AAS	5208
	General Banking Certificate	5208
IECC-Wabash Valley	Library Media Technology AAS	2503
Kishwaukee	Accounting Certificate	520302
Lake County	Quality Technician AAS	150702
	Quality Technician Certificate	150702
Lincoln Land	Surveying Certificate	1511
	Surveying AAS	1511
Richland	Production Control Certificate	150702
Sandburg	Machine Drafting and Design AAS	15085
Shawnee	Dietary Manager Certificate	200404
Southeastern	Drill Press Operator Certificate	4805
	Sheet Metal Certificate	4805
Spoon River	Banking, Finance & Credit AAS	520803
	Banking-Basic Certificate	520803
	Banking-Standard Certificate	520803
	Banking-Advanced Certificate	520803
	Commercial Lending Certificate	520803
	General Banking Certificate	520803
	Banking-Standard Certificate	520803
Waubonsee	Computer-Aided Cost Estimating Certificate	150810



**U.S. Department of Education**  
Office of Educational Research and Improvement (OERI)  
National Library of Education (NLE)  
Educational Resources Information Center (ERIC)



## **NOTICE**

### **REPRODUCTION BASIS**



This document is covered by a signed “Reproduction Release (Blanket) form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a “Specific Document” Release form.



This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either “Specific Document” or “Blanket”).