I. Vision

This document provides a planning framework for the expansion and improvement of technology resources at DACC. All of our users depend on technology, including students (potential, current, and former), staff, faculty, and the public.

II. Planning and Budget

For some years, educational institutions in Illinois have been experiencing funding challenges; for example, some grants which have been used in the past to support technology have been cut or eliminated in recent years. At the same time, dependence on technology throughout the educational community is constantly increasing. In order to provide a mechanism for examining future technology needs, and to identify funding sources to support them, budget planners in departments across campus create three-year capital equipment plans: they request the equipment needed for the coming year, and they also look at technology needs for the two following years.

III. Technology Areas

There are four departments that directly manage technology:

- Administrative Data Systems is responsible for the management information system. This system contains student information and records, human resources information, and financial information.
- Computer and Network Services manages all workstations and end-user technologies (both for students and employees), all servers not part of the MIS (such as mail, web, and file servers), the network infrastructure, and other related technologies.
- Instructional Media provides audio-visual services.
- Online Learning & Services provides technical support to online faculty and students, administers the current learning management system, Blackboard Learn, and manages the campus website.

This structure leads to six distinct areas of technology on the campus:

- Student end-user technology
- Employee end-user technology
- Network infrastructure including servers
- Management Information System
- Instructional media
- Online learning technical support including web presence
IV. Student end-user technology

This section was prepared by Jeff Williams, Naomi Yonke and Vince Frost of Computer and Network Services.

Computer technology is constantly advancing, and this drives changes in the computer labs and classrooms on campus.

One significant trend involves data storage. We now encourage the use of three primary means of storing data: USB flash drives, local network storage, and Google Drive cloud-based storage. All students are automatically given accounts that provide them with access to personal storage areas on the network and in the cloud; these are accessible from all lab computers and from off-campus via the web.

Each student has a Google Apps account which provide E-mail, calendar, Drive (mentioned above), chat and Hangouts, and various others services. These services are all available from anywhere with an Internet connection. Google Hangouts allows the use of text, audio, and video, and supports multiple participants, making it easy for instructors and students to participate in online discussions.

All new lab computers for the last five years have had CD/DVD writers as standard equipment. This allows students to use CDs and DVDs to store data, and also allows the use of DVD instructional media in those classrooms. For data storage, however, the use of flash drives and network or cloud-based storage are preferred and are recommended to students.

Software companies continue to update their products at a rapid pace, which can present challenges for instructors, students, and support personnel. Aside from web browsers, the most commonly-used software package on campus is Microsoft Office; Microsoft Office 2010 is the standard in our computers labs and offices. Microsoft Windows 7 Enterprise is the standard operating system in student labs (and offices).

The Microsoft Campus Agreement provides campus-wide licensing for the Microsoft products in common use on the campus (such as Windows and Office). This is renewed each year.

The college also makes use of many free software products, such as Mozilla Firefox, Google Chrome, Adobe Reader, Flash Player, and Java. These are all updated throughout the year.

A single brand of computer hardware, Lenovo, is used in all computer labs. This helps keep the total cost of ownership down and improves manageability. In both hardware and software terms, such standardization is desirable whenever possible to reduce support costs and to provide a consistent experience to the students.

V. Employee end-user technology

This section was prepared by Jeff Williams, Naomi Yonke and Vince Frost of Computer and Network Services.

Employees are facing many of the same changes in their offices that students and instructors are facing in the classroom. Technology moves rapidly, and it can be a challenge to keep up.
Standardization can help with this challenge. As much as possible, we try to maintain single versions of commonly-used application software packages throughout the campus. This makes it easier to share data between offices without compatibility concerns. It also makes it easier for users to help each other with application issues, since everyone is running the same software. Software upgrades will be done on as broad a basis as possible to maintain compatibility; at a minimum, all workstations within individual departments will be upgraded to the same levels at the same time. Whenever software upgrades are planned, training should be made available to the users.

Likewise, a single brand of computer hardware, Lenovo, is used in all offices. This helps keep the total cost of ownership down and improves manageability. In both hardware and software terms, such standardization is desirable whenever possible to reduce support costs and to provide a consistent experience to the users.

Office computers are replaced based on their age. Each year the oldest computers are replaced with new computers; the number of replacements depends on available funds.

Google Apps accounts are provided for all employees. This provides E-mail, calendar, Drive, chat and Hangouts, and various others services. These services are all available from anywhere with an Internet connection.

The Microsoft Campus Agreement provides campus-wide licensing for the Microsoft products in common use on the campus (such as Windows and Office). This is renewed each year. Whenever possible, employees are encouraged to use Microsoft products that are part of this licensing agreement.

VI. Information Technology infrastructure

*This section was prepared by Jeff Williams, Naomi Yonke and Vince Frost of Computer and Network Services.*

There are two primary factors that drive network development on the campus: security and performance. Network security is a key issue because the college has a duty to protect the sensitive data that it must store in order to serve students; this is in addition to the general need for security to protect information like user passwords. Network performance must be continually evaluated and improved because the usage of the network is constantly growing.

In 2010 the Illinois Century Network through Central Management Services successfully applied for a federal stimulus grant to connect all 48 community colleges in the state of Illinois with state-owned fiber-optic cable. This eliminates the need to pay monthly fees to telecommunications carriers for the use of dedicated circuits such as T-1 and CSME; thus ICN will provide more bandwidth to its users at lower cost. As of late 2013 the project is nearly complete, and DACC is now connected to the point-of-presence in Champaign-Urbana, providing a 10Gbps link. DACC will use a portion of this for our users and will have a total of at least 200Mbps, with the option of easily acquiring more as it is needed. We will also serve as a community anchor institution, and other local organizations, such as Danville School District 118, will connect to ICN via the DACC campus.
As of late 2013, there are three remote (off-campus) sites: the Village Mall office, the Job Training Partnership Office, and the Hoopeston Learning Center. These are all provided with cable Internet access, and firewalls at those locations provide security and remote support access.

In 2014, the existing Cisco 6509E core network switch will be replaced with a new Cisco switch that supports 10Gbps connections. Combined with recently-installed edge switches which bring gigabit connections to the desktop, this will allow for improved performance. Concurrently, all Computer and Network Services servers are being moved to a virtual platform to improve both performance and reliability, at the same time reducing costs.

The wireless network has been expanded every year for the past several years. As of 2013, there are 60 access points providing wireless coverage in all of the buildings on campus. More access points will be added during the course of this plan.

VII. Management Information System

This section was prepared by Kim Colwell, Director of Administrative Data Systems

The Administrative Data Systems department maintains the Management Information System (MIS) for business functions at Danville Area Community College. The Administrative Data is a vital institutional resource that consists of current and historical information for students, faculty and employees, Financial Aid and the Business and Finance department. The college utilizes the “Colleague” application services leased from the Ellucian Corporation as its central repository of data.

MIS (and Colleague) is generally divided into the following primary functional areas:

- **Student Information** consists of all data relating to student registration, grades, billings and demographics. Functions include maintaining course and grade history for transcripts; maintaining current and historical demographic information for state and federal reporting; maintaining billing and receivable history; and providing information to each student via the Jaguar SPOT.

- **Faculty information** consists of all data relating to faculty and curriculum information. Functions include maintaining course information for state agencies; faculty scheduling and workload information and providing faculty and course information via the Jaguar SPOT.

- **Financial Aid information** consists of all data relating to each student’s Financial Aid track while at DACC. Functions include transmittal and receipt of federal, state and private financial aid information; disbursement of funds; reporting to various agencies and other support of the Financial Aid department.

- **Business and Finance department** support consists of all data relating to General Ledger and financial functions; integration with DACC’s banking institution; budget information and payroll related operations. Functions include checking account and ACH account interactions; supplying budget information to employees via the Jaguar SPOT; payroll processing; purchasing, Accounts Payable and Accounts Receivable support; detail and summary reporting functions and other General Ledger related functionality.
Human Resources department support consists of all data relating to hiring and employment of personnel. Functions include maintaining and reporting on personnel information to state and federal agencies; supplying year-end data and reporting to employees and government agencies; and supporting employee information availability on the Jaguar SPOT.

To provide support for these MIS functions, the Administrative Data Systems department is committed to the following strategies:

- **Support for the Jaguar SPOT.** The Jaguar SPOT supplies a single point of information access for students, faculty, employees and even guests to utilize. If logged on as a student, faculty or employee, a user has access to a variety of information specific to that individual (for example, an employee may view their paycheck information or a faculty member may view their current class list, etc.). The Jaguar SPOT is an information portal available from the DACC home page inside or outside of the campus 24 hours per day/seven days per week.

- **Data Stewardship.** DACC’s intent is to provide an information environment that promotes self-sufficiency and that the user or using department is responsible and accountable for their own data. In this concept, the MIS department does not “own the data”, but maintains the environment where the data is stored. Data accuracy is the responsibility of the using department.

- **Data Security policies** are in effect for all information stored in the MIS databases. Individuals log on to either the Jaguar SPOT or, internally, to a “User Interface” (UI) screen that is reserved for employee use. The UI allows more direct access to the Colleague system, and is based on employee levels of security specifically related to the job that is the employee’s responsibility.

- **Direct data exchange** with the college’s Learning Management System (Blackboard). The department sends nightly data uploads to Blackboard to maintain current student enrollment in LMS classes. There are several other automated data uploads to various other vendors as well; such as MapWorks student data, EMS room and facilities scheduling, Bank information regarding outstanding checks, etc. There are also some data downloads on a regular basis – cancelled checks from the bank, bookstore items purchased where Financial Aid is used, FACTs payment plans payments accepted, etc.

- **Secure access to information.** The Administrative Data Systems department will provide one or more means for users to have secure access to their information. These include queries and reports written for users; data extracts supplied in user-specified formats; and access to reporting capabilities that the user may customize for their own use.

- **Data Integrity.** One of the most vital elements of our system continues to be the integrity of our data. Toward this goal, the department maintains an on-going awareness of security and privacy issues, which include robust backup and retention strategies; Disaster Recovery planning; and constantly examining opportunities to increase efficiencies within the department.
Goals (2013-2016):
The Colleague system and the hardware base that it runs on is nearing its eighth year of continuous operation. While the software has been continually upgraded, and is presently current, the hardware has been performing reliably without upgrade and only minimal maintenance issues. It is time to begin examining replacement strategies for the MIS hardware. There are some other components of our department that need to be examined for possible upgrading as well.

1. **Internal Documentation** of procedures needs to be enhanced and updated with current operations notes. This will enhance our Disaster Recovery procedures as well as providing a reliable base of procedures for cross-training purposes.

2. **ICCB deadlines**. Recent activity within ICCB has resulted in a large increase in their examination of the ‘quality’ of data submitted to them on a regular basis (from all Illinois Community Colleges). While ultimately providing more reliable data in general, this results in a large programming ‘push’ from our department to clean up the quality of the data that we submit to ICCB all year long. To handle this, we are in the midst of a programming effort to supply ICCB with the cleanest, most reliable data possible. This push should be completed before the end of Fiscal Year 2014; after which programming efforts in this area will reduce to minor maintenance issues.

3. **Entrinsik Informer reporting**. The department has recently installed a software package “Informer” from Entrinsik) that will allow end users to create and run their own custom reports from Colleague data. Our near-term efforts are to build a library of useful reports for end users; and to ultimately reduce their need for custom queries and reports, resulting in quicker turn around and more reliable user reporting.

4. **Revise Colleague Security Classes**. The Colleague security classes need to be reviewed, cleaned up and simplified and built around a role-based security paradigm, rather than on the present user-based template. This will result in tighter control of user access, and simplify the maintenance issues surrounding security classes.

5. **Replace FRx software**. The aging FRx software (used by the Finance department for specialized General Ledger management reports) will soon no longer be supported by Ellucian. We will need to upgrade to a new package (also supported by Ellucian) within two years.

6. **Hardware upgrades**. We will soon need to examine some hardware upgrades to maintain an efficient and reliable base for the MIS system. We anticipate beginning this process in 2015 with expected migration to a newer hardware base in 2015 or 2016.

VIII. Instructional Media

*This section was prepared by Jon Spors, Director of Instructional Media.*

The Instructional Media Department provides support to Danville Area Community College through the distribution of instructional equipment, interactive instructional equipment, media production, presentation materials, video-conferencing, media duplication services and campus-wide digital signage. Our mission is to work with the faculty, staff, students and all individuals
and organizations that interact with the college in a collegial, collaborative manner to arrive at effective and efficient delivery of media services.

The overriding mission is to support Danville Area Community College in providing quality, innovative and adaptive programs and services which meet the life-long academic, cultural and work force needs of the DACC community. The core values of integrity, excellence, communication and adaptability are to be incorporated into the decisions and services provided by the Instructional Media Department.

**Vision**: The Instructional Media Department will support and encourage the effective and appropriate use of existing and emerging technologies to support student-centered learning, student success and enhancement of college functions.

Six specific goals have been identified to support the vision stated above. Each goal is followed by a brief description of current status and strategies for the future.

**Goals (2013-2016):**

1. **Streamline, improve and prioritize menu of services offered by Instructional Media.** Utilization of services is analyzed annually to meet changing demands. Over the past five years, Digital signage has been implemented and many interactive devices have been incorporated into curriculums throughout the campus. These devices include Smart boards, Epson Bright Link systems, Student Response systems, and Touch Panel remote devices. DVD production and duplication have increased. Over the next 5 years, these devices will become standard in many classrooms on campus. New technology will be implemented as appropriate. We anticipate seeing more demand for digital formats as HD become more prominent as well as video on demand. A well-defined focus of the Instructional Media menu of services in relation to our mission will result in improved quality and productivity.

2. **Enhance communication between Instructional Media and the DACC community served.** Continue to use ongoing faculty and staff interviews to evaluate services and to define future needs. Make critical assessment of services offered in terms of allocation of resources. Analyze all communications received by Instructional Media from clients to evaluate outcomes on an ongoing basis. Utilize surveys as appropriate. Make an annual proactive campaign to compile listing of classroom equipment needs to improve allocation of hardware across all disciplines and provide data for budgetary consideration. Raise profile of Instructional Media as a major campus resource for instructional materials and services utilizing all available modes of communication. Collaborate with all levels of administration, Faculty, Staff and Students to develop, adopt and implement workable plans.

3. **Continue and expand classroom modernization efforts to build user friendly and effective learning environments.** A primary focus for the upcoming years will be to streamline installations in existing classrooms to provide safer, tidier and more user-friendly learning environments. This will require considerable investment in labor and finances. Classroom enhancements will also require revenue for advancement.

Currently, all major classrooms have digital projectors, sound systems and multimedia capabilities. About half of the classrooms have interactive technologies such as Smart or
Epson systems. About a third of the classrooms have document cameras. Conference areas and classrooms will need updates as needs change and technology advances

4. **Encourage and implement more effective use of technology in the classroom and online by providing staff and faculty with training opportunities for utilizing technology.** Provide ongoing training to staff and faculty on use of new technologies for education. Implement new technologies for teaching and learning such as Smart Boards, Epson Bright Link systems, pod casting and iClickers (the Student Response System that was selected to be used campus-wide in classrooms desiring this technology).

Instructional Media provides training on topics which are being utilized in other academic settings to determine whether the techniques would be beneficial here. Logistical and technical support by Instructional Media encourages use of technology for teaching and learning. Instructional Media strives to implement systems which are user friendly and repeatable for similar utilization throughout campus.

The department encourages practices which are pedagogically sound and implements new technologies in an effective, yet efficient manner. Instructional Media will continue to sponsor opportunities for specific training in techniques used for utilizing technology in the classroom.

A wide array of Star Link programs having to do with educational technology have been made available to staff and faculty. Each year, participation in ILCCO technology sessions, IOC (Illinois Online Conference), Faculty Summer Institute sponsored by the U of I, ION events and numerous other venues presented via the internet are offered through Instructional Media.

One-on-one training in using specific presentation and production hardware is given to faculty and staff on an ongoing basis as well as training sessions offered at college in-service days. Instructional Media will continue and expand these practices.

5. **Maintain, replace and acquire hardware to maintain and enhance the delivery of services in all aspects of services provided and to be provided as future needs are identified and solutions implemented.** During the past year, 2 main infrastructures have been replaced and upgraded: the gymnasium sound system and the Audiovisual systems in the Bremer Theater. In addition, lighting problems have been addressed. In the future, LCD projectors in major conference rooms will need to be replaced and systems upgraded. Interactive video systems will need to be upgraded and replaced as well as distribution systems for video to our local cable station. Classroom equipment is currently on a 5 to 6 year budget cycle and that should continue as equipment improves and pedagogy dictates. Digital signage should be expanded in new areas on the campus. Emerging technologies need to be considered as replacements and additions are made throughout the areas of service...

6. **Advance in capabilities and efficiency in media production for delivery of digital products such as DVD, video on demand, digital signage, streaming video, cable broadcasts, marketing communications and student productions.** In recent years strides have made in replacing analog technology with digital systems. This trend should continue as user expectations increase and more and more digital technology has become available for our student population. Strides have been made in acquiring digital video
cameras and other devices. However there is still a need to enhance capabilities to produce and distribute in HD quality.

IX. Online Learning and Services

This section was prepared by Maggie Hoover, Lead Professor, Online Learning & Services / Blackboard Administrator

Online Learning & Services at Danville Area Community College provides instructional design and technology support to our online faculty and students. The department continually assesses, reviews, embraces, and improves the use of technology in educational activities and business processes.

The mission of Online Learning & Services at DACC is to assist with the integration of instructional technology into the curriculum that directly improves, supports, and benefits online learning through sustainable development while embracing technological changes which meet the requirements of our key stakeholder groups.

Faculty Support

Online Learning & Services is a resource which works with faculty to improve teaching and learning through effective use of technology, thus providing a more dynamic and substantial learning experience for students. Online Learning & Services supports faculty in the development of online, hybrid/blended, and web-enhanced courses through the provision of the following services:

- Provides and fosters individual consultation to faculty in order to determine specific needs and assistance in design procedures and processes in order to teach specific concepts and address pedagogical needs based on theories of communication, learning, and instruction in order to meet a wide variety of student needs.

- Designs and develops engaging, interactive, and instructionally sound materials at the request of faculty for their use in courses and classroom. Researches, writes, and produces clear documentation and/or tutorials in support of these materials.

- Plans, coordinates and conducts special topics presentations/workshops and/or individual consultation in the use of technologies and tools for faculty and students.

- Serves as a source of information on trends, research, applications, and effective practices related to technology use in all curriculums.

- Provides onsite assistance to faculty in evaluating, selecting, loading, and maintaining course cartridge and building block solutions unique to online classroom use.

- Partners with the Instructional Media department in the development and implementation of resources, activities, and instructional materials that are appealing and media rich to both faculty and students.
Partners with the Administrative Data Systems department in the coordination of integrating and syncing student data with current Learning Management System (LMS).

Maintains an online faculty resource web page that serves as a repository for posting instructional design resources. Resources include current Learning Management System (LMS) documentation as well as tools, links, and information regarding trends in technology to assist and support online teaching faculty in their day-to-day operation and maintenance of online courses.

Facilitates the Online Learning Advisory Committee. Fosters continued implementation of an adopted set of standards and best practices that all online courses should adhere to in order to ensure that the College’s online course offerings are of the highest standards.

**Goals (2013-2016):**

1. Continue to assist and support online faculty on the existing LMS platform.

2. Partner with DACC’s Institutional Effectiveness and Research department in order to strengthen this existing alliance and assist in AtD (Achieving the Dream) reporting and ongoing online course evaluation efforts.

3. Continue to partner with DACC’s Institutional Effectiveness and Research department to enhance the course evaluation process administered electronically to all students as well as improve percentage of completion rates.

4. Continue to facilitate the collaborative efforts of DACC’s Online Learning Advisory Committee. Committee goals include: incorporating AtD cooperative learning strategies into online courses; implementing strategies to improve retention rates in online courses; assessing completion/success rates of online to traditional courses; benchmarking curricula delivered through on-line leaning against on-ground courses and programs; implementing and fulfilling the accrediting standards comprised in the *Guidelines for the Evaluation of Distance Education (On-line Learning)*, a framework developed by the Council of Regional Accrediting Commissions (C-RAC), a council in which the Higher Learning Commission is a member.

5. Implement student verification procedures to ensure that the student who registers in a distance education course or program is the same student who participates in and completes the course or program.

6. Address course quality and design as well as ensure that course standards are incorporated by taking inventory of online course shells.

**Support and Retention of Online Students**

Online Learning & Services assists in online student retention efforts by providing quality technical support to ensure student success and completion. Services include:

- Hosts face-to-face Online Learning Orientations (INST 110) at the beginning of each semester, including late-starting courses, in order to assist and prepare students once they
have registered their first online course at DACC. Orientations are free, non-credit, 1-hour sessions that focus on technical and practical issues including: recognizing key characteristics of good online learners; identifying instructors’ expectations of online students; making technical preparations, including demonstration of USB storage devices; accessing technical support; establishing an ID and password; contacting the instructor; locating and logging into courses; course navigation; communicating within courses; taking quizzes/tests; submitting assignments; and accessing library resources remotely. An online equivalent of the face-to-face orientation is also available to students if that mode of delivery is preferred.

- Provides technical support via method of student’s preference: phone, e-mail, an online support request form available via DACC’s web site, and in-person. Support is facilitated throughout the year during scheduled working hours of the Online Learning & Services department.

- Provides training video tutorials specific to the online experience at DACC. Videos are screencast format.

Goals (2013-2016):

1. Implement new technologies or methods as necessary to remain in compliance with Department of Education in regards to verifying student authentication within learning management systems (LMS).

2. Continue to ensure compliance with the accessibility requirements for online instruction as outlined in sections 504 and 508 of the Rehabilitation Act.

3. Examine and support ways to make higher education fit on increasingly smaller mobile devices (smartphones, tablets).

4. Assess student learning and performance in online courses.

5. Continue to enhance and build upon Online Learning Orientation (INST-110); face-to-face and online versions for students.

6. Assess student retention and completion issues in online courses through the use of an LMS retention tool, a real-time application that provides actionable information around student persistence and learning outcomes.

X. Learning Management System (LMS)

This section was prepared by Maggie Hoover, Lead Professor, Online Learning & Services / Blackboard Administrator

The impact on IT funding in terms of increasing licensing, hosting, and local support costs, as well as the continuing maturity of open-source options, Learning Management System (LMS) selection continues to be on the forefront of many higher learning institutions. Although there are no current plans to adopt and migrate to a different LMS, the Online Learning & Services department at Danville Area Community College continues to investigate and remain apprised of next generation LMS platforms for future selection and implementation of a successor to our
current LMS, Blackboard Learn 9.1. The average number of course shells per semester on Blackboard is 270 (duplicated; representing fully online, hybrid, or web-enhanced).

Through our involvement and membership in Illinois Community Colleges Online (ILCCO), a local consortium, DACC continues to attend LMS vendor demonstrations and participate in networking opportunities among those stakeholders in order to be cognizant of emerging trends in online learning as well as possible purchasing opportunities. The following items continue to be key components of LMS selection for DACC:

- transparency, ease of use, student friendly navigation
- a robust platform that includes internal e-mail, intuitive online grade book and student record management (including student tracking), online assessments, discussion board, calendar, assignment drop box, syllabus, built-in HTML editor, equation editor, template driven, selective release, content modules, integrated media capabilities (video & audio)
- ability to import Publisher Test Banks and/or Publisher Content
- online support tutorials
- LDAP integration
- Colleague integration
- hosted solution options

XI. Web Presence

This section was prepared by Maggie Hoover, Lead Professor, Online Learning & Services / Blackboard Administrator

Web Presence refers to the College’s accessibility, availability, and overall image as represented to the Internet. This section encompasses the systems and services that are directly used by College employees, students, or the public via the Internet.

Goals (2013-2016):

1. Continue to enhance the College’s Web Presence (dacc.edu)

College Website Redesign

DACC has entered into a contract with PlattForm Advertising, a design firm, to redesign the College’s current website. The new site will be built within a secure, robust, content management system. The content management system will improve the readability, navigation, consistency, and layout of the pages within the site. The Online Learning & Services department is partnered with the Marketing department in order to serve as the liaison between DACC and PlattForm as well as to ensure timely completion of the project. A committee comprised of key stakeholders across campus has been formed and participates in the complete process: discovery, creative, development, and quality assurance.

Specific strategies of the redesign include:

- Build the brand (promote the institution)
- Increase prospective student traffic to the site
- Present comprehensive information and resources in an easy to use format
- Strengthen relationships with alumni, community partners, donors, and staff
- Attract qualified and diverse faculty
- Improve business efficiencies
- Ensure and implement web content accessibility guidelines (compliance of Section 508 standards of College website content)