

## COMPTON COMMUNITY COLLEGE DISTRICT PROGRAM REVIEW

# *Management Information Systems*

## *Office of the Chief Business Officer*

### **I Overview of your Program/Department**

*Provide a brief description (narrative) of the program/department so that the reader clearly understands the elements of the program/department. Include information on any degrees and or certificates which are offered in the program/department.*

#### Program Profile

Information Technology Services helps the Compton Education Center (CEC) utilize technology to provide students with the greatest opportunity for achieving their educational goals; faculty with the resources and support necessary for continued excellence in instruction; administrators and staff with the most efficient and effective work environment for overseeing daily institutional operations; and the community with effective, efficient, and timely responses to their needs for information, training, and instruction.

The unit is completely integrated with El Camino College's Information Technology Services to (1) maintain and operate the center's telephony and data infrastructure, (2) maintain and operate the center's legacy data systems, including Datatel / Ellucian Colleague, (3) acquire and distribute new computing equipment including PCs and printers, (4) provide printing and copying services, (5) provide mail services, and (6) provide main telephone receptionist services.

All academic, administrative, and student support functions of the center are increasingly dependent on very complex computer networking and data systems that interconnect departments across the District, with state and federal governments and the college with higher education institutions across the country and throughout the world.

#### Status of Previous Recommendations

##### **Goal 1. Data Systems and Networking**

###### **FCMAT Recommendation #5 Provide a fully Integrated Technology Platform**

*Plan to provide either a fully integrated technology platform or a suite of best-in-class applications supporting the eventual independence of Compton from ECC when their application hosting will no longer be available.*

The recommendation is not complete.

Compton has a Datatel proposal to reactivate the Colleague modules that were deactivated in August, 2006 at no additional cost to the College. However, Ellucian recently purchased both Datatel and Sunguard it is doubtful they will honor the Datatel / Compton agreement.

##### **Goal 2. Equipment and Software**

### **FCMAT Recommendation #3 Technology Standards**

*Create and enforce standards for all types of technology purchases to increase standardization and reduce support and training costs.*

This recommendation is complete.

The college has created standards for all technology hardware and software. The college reviews the standards annually and posts them on the web site. ITS has the authority to review and approve all technology acquisition.

### **FCMAT Recommendation #4 Provision of Adequate and Current Technology**

*Ensure that IT equipment, applications, and supporting infrastructure are sufficiently modern and present in sufficient quantity to support the needs of the district.*

This recommendation is not complete.

The college has the capability to conduct an partial or complete inventory at will via client software that enables PCs to report their status. While the college can use this data to forecast replacement cycles, it lacks the budget to implement them.

## **Goal 3. Staffing**

### **FCMAT Recommendation #1 Organization of the MIS Department**

*Organize the MIS department to fully meet the independent needs of the district and prepare for return to accreditation.*

This recommendation is not complete.

It calls for a five-year disengagement plan to achieve separation from El Camino College ITS. During this period staff would be recruited and trained. Desktop services would transition first, followed by network services, and, finally ERP application development and programming. At this point, the partnership would end. The staff are trained and occupy appropriate job descriptions and there is a long term staffing plan. However, the college lacks funding to increase IT staffing to a level commensurate with its technology needs.

## **Goal 4. Technology Training**

### **FCMAT Recommendation #2 User Training**

*Ensure that district employees are fully trained and competent to take full advantage of the IS applications available on campus.*

This recommendation is complete.

ECC and Compton Colleague users are engaged in “train the trainer” sessions. They know about [www.ellucian.com](http://www.ellucian.com) and 3CDUG. Managers are working with their local Institutional Research staff to extract data from Colleague for reporting purposes. Finally, the MyECC portal has dozens of pre-programmed reports that can be downloaded into MS Excel and Access.

## Continuing Recommendations

### **Goal 1. Data Systems and Networking**

#### **FCMAT Recommendation #5 Provide a fully Integrated Technology Platform**

*Plan to provide either a fully integrated technology platform or a suite of best-in-class applications supporting the eventual independence of Compton from ECC when their application hosting will no longer be available.*

The college should give serious consideration either to outsource its ERP or to draft an RFP to purchase a new product.

**Goal 2. Equipment and Software**

**FCMAT Recommendation #4 Provision of Adequate and Current Technology**

*Ensure that IT equipment, applications, and supporting infrastructure are sufficiently modern and present in sufficient quantity to support the needs of the district.*

The college should initiate discussions with the Planning and Budget committee to establish a technology budget, however small, to begin the process of managing a regular upgrade cycle.

**Goal 3. Staffing**

**FCMAT Recommendation #1 Organization of the MIS Department**

*Organize the MIS department to fully meet the independent needs of the district and prepare for return to accreditation.*

The college should charge its technology committee with the task of recommending solutions to the lack of balance between its technology needs and its support staff and budget resources. The effort should also technology and staffing requirements of an eventual disengagement from El Camino College.

## II Analysis of Institutional Research Data & Student Services Outcomes (SSOs)

*The data will further provide a more complete understanding of the success and challenges which the program/department faces. Here is a good place to incorporate your indicators and customer satisfaction surveys.*

There is no recent record that the Center's staff and faculty have ever responded to a customer satisfaction survey. Neither is there sufficient anecdotal data from which to draw conclusions about performance that could lead to efforts for improvement. Since August, 2006 the Center has been transitioning from a full service unit functioning in an accredited college to an educational center of another college. El Camino College's effort was to consolidate the center's services and integrate them with its own services. Among the many goals was a desire to create a uniform, transparent technology infrastructure spanning both campuses which would provide the same services to all users, students and staff, regardless of location.

One of the first deployments was the consolidation of the help desks. This data shows that the transition from the Center's Protocol MIS system to El Camino College's highly customized version of Datatel Colleague ERP was difficult and sometimes painful. Log on issues and requests for procedural assistance populated the trouble tickets. Printer issues were the second largest source of problems.

Commented [JFW1]: Check with Rudy on this.

### III Facilities and Equipment

*Comment on the facilities used by the program/department; the adequacy and currency of these facilities; immediate needs; and long-range needs.*

The unit is housed in a stand-alone facility. IT offices are located in a structure that is undergoing an “in-place” remodel. The data center renovation is complete. All data systems are new and meet “best practices” standards.



Print and mail services have been moved to the Row Building D. ITS offices and the telephone reception service have been temporarily relocated to an area of the building previously occupied by the copy center. The facility is secured by numeric key pad door locks capable of recording card access data. The network server room is protected by a second numeric key pad door lock.

The college began constructing a campus-wide infrastructure trenching project. When completed all buildings will be connected to this utilities backbone.

The utilities infrastructure project is underway and will be completed in two years. However, there is no provision to connect the data center and existing building to this infrastructure.

Commented [JFW2]: Is this still true?

The college is scheduled to open the new Learning Resources Center in April, 2014. The staff will move in over spring break (March 15-21). The grand opening ceremony is scheduled for April 15, 2014. This event will mark a major expansion of the technology infrastructure and a much need service center for student learning and research. The facility will also house student tutoring services basic skills instruction, and a 100 seat general access computer commons on the mezzanine. Altogether, the college has added 205 PCs to its inventory.

The condition of the technology in the row buildings is a concern. The intermediate distribution closets (IDFs) are inadequate and not air conditioned. The data/voice cable installation is completely substandard and should be redone. There is no color coding of the staff and student cable runs.



In most of the offices and classroom computer laboratories the cable is exposed and in some cases run over floors where it is subject to damage by foot traffic.

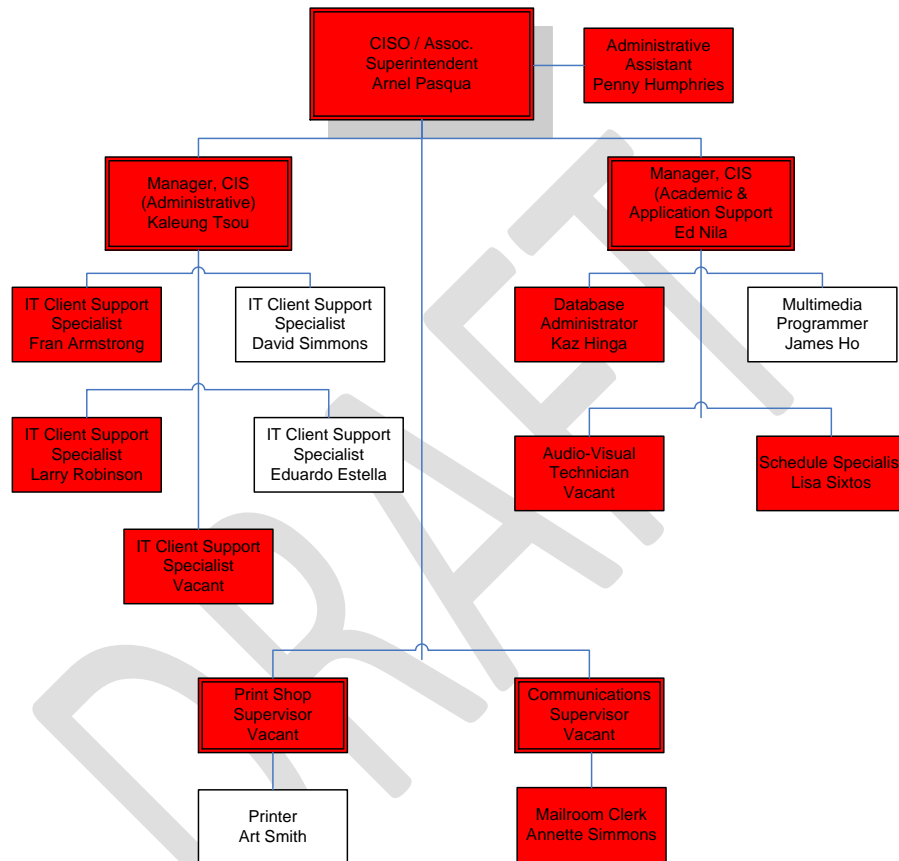


MIS staff offices and work areas are another area of concern. Remodel drawings and blue prints exist. However, the project was placed on indefinite hold when the money ran out. Completing this project to accommodate a staff expansion will be necessary to meet accreditation standard IIC as well as compliance with the other standards..

#### IV Staffing

Examine current staffing and the program/department's needs now and in the next five years.

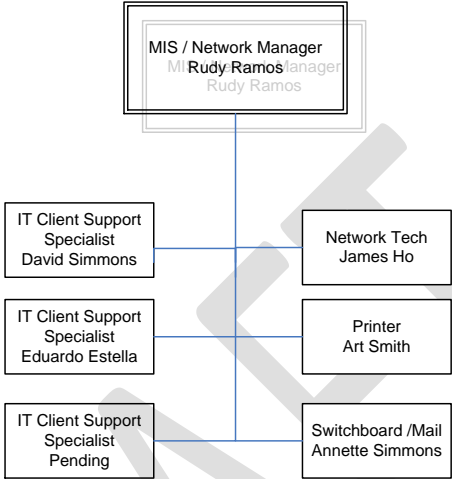
The organization chart below show the operation as it existed in late February, 2007 with vacancies highlighted in red.



Less than six months into the partnership with El Camino College the unit lost all of its management position including the CISO / Associate Superintendent, the Administrative (Network) Manager, and the Manager of Academic & Application Support. Beginning in the summer 2007 the unit has been led by a manager of network services who is an employee of El Camino College permanently assigned to the center. In 2008, this person was elevated to manager status.

The current organization chart 7 staff; 1 manager, 1 network technician, 3 IT client support technicians, 1 printer and 1 switchboard operator / mail room clerk. In the summer, 2007, El Camino College hired a network manager to work at the Compton Center.

There has been no other hiring. Only 5 of the 17 staff on site in August, 2006 remain. It is crucial that the Center address the staffing of this unit in order to insure that the unit is capable of meeting the technology needs of the school.





## V Planning

*Look both externally and internally to see what changes or trends will impact your area in the next 5 years. Where do you want the program to be in five years? What goals and objectives will your program set in relation to the district's mission and goals?*

### Changes and Trends

1. New technology will enable ITS to utilize remote management to monitor and service many of the computers and other devices attached to the network. As a result, technology maintenance and upgrade procedures will migrate from high touch low online to low touch high online.
2. Virtualization technologies that make it possible to create and consolidate “electronic” network servers on a single physical server and to create “dumb” terminal PC desktops that provide full desktop services at a fraction of the cost of a dedicated PC workstation.
3. Technology that enables an increasing amount of work to be migrated to an online environment where the end users enter and manipulate the data.
4. Increasing functionality will migrate to the Internet Protocol (IP) network. This will make the college increasingly reliant on technology and result in high expectations for network reliability and availability. Malfunction and system failures will cost the college money, enrollment, and create high anxiety.
5. The state will continue to support the centrally funded high speed bandwidth interconnection of the K-20 sector. Bandwidth rates will continue to increase, making the college targets for spamming, phishing, and other malicious hacking and high jacking. The college will need to become more serious about defending itself. An increasing percentage of the technology budget will be spent on security appliances and campaigns to increase user awareness.
6. The college will acquiesce in the continued expansion of the number of academic computer laboratories while withholding adequate funding and support staff to keep them operational, secure, and productive.
7. The desktop PC, the telephone, and mobile devices will converge onto a single platform that provides anything, anytime, anywhere information services to everyone. This will give rise to the mobile student and put pressure on the college to create networks to service this population.
8. Web 2.2 will connect users to distributed computing and social networking so as to revolutionize academic and administrative business practices by incorporating personalized services with grouped human interaction. This technology, along with virtualization, will give rise to the mobile student which will profoundly alter the instructional interaction of students and faculty.
9. The rapidly changing technology sector will exert pressure on the college to keep the job descriptions of the support staff current. The college's policies of prohibiting revisions to existing job descriptions while penalizing managers who allow staff to work out of class will jeopardize unit services and increase user discontent. The college will blame the unit for the decline in services and the resulting unrest.

## **Goals and Objectives**

The goals for this program review cycle consist of three FCMAT recommendation that are still pending. They emphasize the need to deal with staffing and organization, post accreditation ERP services, and keeping the technology infrastructure current. It does not point to solution. Rather it suggests that the College articulate and discuss the issues and challenges. From this dialogue there can emerge a consensus about the options and solutions. This effort will have particular meaning during the time the College is drafting the various documents and reports that can lead to accreditation.

### **Goal 1. Organization of the MIS Department (FCMAT Recommendation #1)**

*Organize the MIS department to fully meet the independent needs of the district and prepare for return to accreditation.*

The college should charge its technology committee with the task of recommending solutions to the lack of balance between its technology needs and its support staff and budget resources. The group should research opportunities for outsourcing as many critical services as possible. The effort should also address technology and staffing requirements of the disengagement from El Camino College.

### **Goal 2. Provide a fully Integrated Technology Platform (FCMAT Recommendation #5)**

*Plan to provide either a fully integrated technology platform or a suite of best-in-class applications supporting the eventual independence of Compton from ECC when their application hosting will no longer be available.*

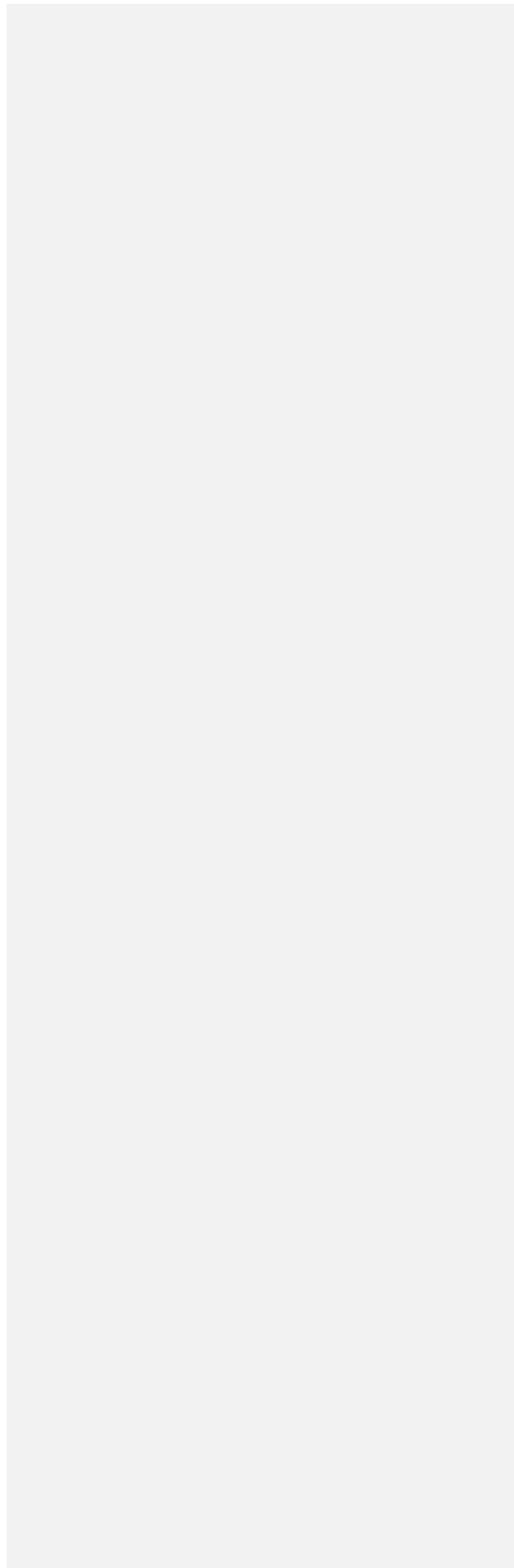
This goal is closely related to Goal 1 but cannot be undertaken until the college decides what sort data center it wants and can afford. Five years ago, Datatel and Compton CCD agreed on a statement of work that would transition the college from a basic installation providing access to its pre-partner legacy data to an independent full service ERP. It is not clear that Ellucian will honor the SOW. Moreover, running a completely independent ERP service is complicated and expensive. It requires skilled database administrators, programmers, and system operators which the college will need to recruit and house. The college may want to consider outsourcing its ERP services to another community college.

### **FCMAT Recommendation #4 Provision of Adequate and Current Technology**

*Ensure that IT equipment, applications, and supporting infrastructure are sufficiently modern and present in sufficient quantity to support the needs of the district.*

The college should initiate discussions with the Planning and Budget committee to establish a technology budget, however small, to begin the process of managing a regular upgrade cycle. Altiris, the college's PC inventory and management system is capable of producing reports that can help rationalize the decisions on when systems need to be upgraded. The committee needs to learn how to analyze and discuss this information, and how to couch their findings in the form of recommendations that go to the administration for decision making.

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## VI Conclusion

List the prioritized recommendations and major potential needs of your program/department. Remember to provide estimates of any potential expenditures or purchasing needs.

While noting serious problems existing with the ITS facility and its staffing, this program review must necessarily focus on the FCMAT recommendations as the most recent indication of the direction the unit must take.

### Goal 2. Data Systems and Networking

#### **FCMAT Recommendation #5 Provide a fully Integrated Technology Platform**

*Plan to provide either a fully integrated technology platform or a suite of best-in-class applications supporting the eventual independence of Compton from ECC when their application hosting will no longer be available.*

Evaluate the pros and cons of outsourcing some or all of the Center's ERP services.

Ask Ellucian Datatel to provide an estimate of the cost of reactivating the Colleague modules that were deactivated in August, 2006. This cost could be the determining factor in a decision to relicense Datatel, go to a different vendor, such as PeopleSoft or SunGuard Banner, or outsource.

### Goal 4. Staffing

#### **FCMAT Recommendation #1 Organization of the MIS Department**

*Organize the MIS department to fully meet the independent needs of the district and prepare for return to accreditation.*

Draft a plan for disengaging from El Camino College.

In order to prepare for the partnership with Compton Center, ECC ITS drafted a five year plan that would begin the Center's transition to full service independent status in year three. The time table and yearly activities are offered for discussion:

##### **Year One – Startup**

Merge the Center's technology with El Camino College's processes and routines including El Camino's Datatel Colleague ERP system. Hire one network/PC Desktop Supervisor for the Center's network infrastructure. Provide access to El Camino College's "MyECC" portal services. Establish a dedicated data connection between El Camino College and the Center. Integrate El Camino College's staff and student email systems with those of the Center.

##### **Year Two – Multi Campus Operation**

Turn over Active Directory services and troubleshooting student portal login issues to the Center's staff. Train the Center's staff on desktop software deployment and Active Directory services.

### **Year Three - Multi Campus Operation**

Hire a Director of Information Technology Services and a help desk technician. Re-establish the Center's data infrastructure services, such as email and authentication. These are the first steps in creating separate college operations.

### **Year Four – Multi-College Operations**

Hire one Application Development Supervisor and one Programmer Analyst. Train the Programmer Analyst in Colleague. Setup the Center's Colleague system to run independent of ECC and implement Colleague application development at the Center.

### **Year Five – Partnership Ends**

Migrate all functionality from ECC's Colleague system to the Center's Colleague System and provide consultation on information technology topics as requested.

Evaluate the staff, the current job descriptions, and prepare a reorganization plan including the following steps:

- Draft a short term staffing plan
- Review, and where necessary, revise unit job descriptions
- Evaluate staff skill sets and deploy for best fit.
- Draft a long term staffing plan

## **Goal 5. Technology Training**

### **FCMAT Recommendation #2 User Training**

*Ensure that district employees are fully trained and competent to take full advantage of the IS applications available on campus.*

Draft a training strategy that involves the end users in their own training.

The unit cannot function as the Center's technology trainer. The unit is responsible for maintaining the operability of the legacy Datatel Colleague system. It is not responsible for the El Camino College Datatel Colleague system. The staff have no understanding of how the various modules the comprise ECC Colleague are being used to accomplish what amounts to highly customized workflows that mirror El Camino College's unique business practices. El Camino College's IT staff, working with end user requests have modified Datatel's "commercial off the shelf" software product. Because the end users requested modifications to fit their individual work flow, they are the ones qualified to conduct training sessions. The following "training" approach has evolved over the 10 years El Camino College has been using Colleague:

- The end users remain responsible for creating "train the user" sessions for themselves; after all it is their system and their customization. El Camino College staff users should train the Compton Center counterparts. This has not happened systematically in all department. It is the Center's responsibility to request training; it is El Camino College's responsibility to provide the training.
- Datatel maintains a feature rich, user oriented web site that includes software documentation, on-demand web demos, webinars, and on-demand, self-paced or hybrid learning. All Center staff who use Colleague should visit [www.datatel.com](http://www.datatel.com). Managers should become familiar with how the site could benefit their unit workers.
- 3CDUG is a very active California user groups that hosts conferences twice a year to discuss issues and to give users the opportunity to make best practice presentations. Datatel staff always attend these conference and are available for specific questions. There is a link to 3CDUG on the MyECC Portal under the "useful Links" tab.
- The local staff development office provides general technology training that include the email system the portal, plan builder, and the Microsoft Office suite.

Help the end users extract data from Colleague and such other third party databases as are being used.

Datatel acknowledges that it is very difficult to extract data from Colleague. Until recently, the company would point users to third party partners such as FRx, Business Objects Crystal, ASG-Safari. Recently Datatel launched a middle-ware product called the "Operational Data Store" which extracts data from Unidata and

uploads it through a filtering process to SQL Server. El Camino College will license this software in Spring 2009. Used in conjunction with Decision Technology's DecisionCentric software which El Camino College already licenses, will give users the ability to create and run "Excel-like" spreadsheet reports on demand. In addition, El Camino IT staff can program special reports upon request. The "Stats & Reports" tab on the MyECC Portal has links to a variety of real time reports including the "Open/Closed Class List," the "Room Book," and "Enrollment & FTES Reports by Term." The documentation for other frequently requested reports will soon be available on the MyECC Portal.

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