Welcome to the PERALTA COLLEGES

Conducted by: Mojdeh Mehdizadeh

January 2009
Introduction

The Peralta Community College District employed the California Collegiate Brain Trust (CCBT) to evaluate existing information systems with a special focus on 1) integration and functionality of existing system architecture, 2) current staffing impacts on the operation of the system, and 3) delivery of services utilizing the system including changes needed. The agreed upon deliverable was a consolidation of findings into a concise written report featuring recommendations for Peralta to be presented to the Peralta Board of Trustees in closed session. Mojdeh Mehdizadeh from CCBT conducted an assessment of the District's information technology (IT) environment in December 2008. This assessment included onsite interviews with IT staff, District administrators and staff, other stakeholders, and a review of IT position descriptions, systems and operations documentation, evaluations of technology planning documents, routine operations, and an assessment of the IT organizational structure.

This report contains some findings and observations which are the perceptions of the individuals being interviewed, and may not be entirely accurate, or the situation may have already been addressed by the District, but the individual was not aware of it. However, these perceptions are an important element of an assessment like this because they may indicate where there are communication problems, or where there may be sensitivities and/or concerns about support, services, and systems.

Interviews

The following individuals were interviewed by Mojdeh Mehdizadeh:

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<thead>
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<th>Individual</th>
<th>Position Title</th>
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<tr>
<td>Tom Smith</td>
<td>Vice Chancellor, Finance and Administration</td>
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<tr>
<td>Karen Ulrich</td>
<td>Director, Employee Relations</td>
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<td>Janet Craigin</td>
<td>Director, Technology Services</td>
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<td>Minh Lam</td>
<td>Director, Applications</td>
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<td>Mark, Anita, Carla, &amp; Debbie</td>
<td>Faculty Leaders</td>
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<td>Jo Ann Phillips</td>
<td>Research Data Specialist</td>
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<tr>
<td>Joyce Brown-Willis</td>
<td>Admissions and Records Specialist</td>
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<tr>
<td>Diana Lara</td>
<td>District Telecom Systems Coordinator and Classified Union President</td>
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<td>Jim Brady</td>
<td>Interim Associate Vice Chancellor, Student Services and Admissions</td>
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<tr>
<td>Debbie Budd</td>
<td>Interim Associate Vice Chancellor, Academic Affairs</td>
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<td>Jacob Ng</td>
<td>Associate Vice Chancellor, International Affairs and Instructional Technology</td>
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<td>Sean Brooke</td>
<td>Director of International Services</td>
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<td>Emerson Whately</td>
<td>Network Architect – Consultant</td>
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<td>Fabian Banga</td>
<td>Instructional Technology Coordinator and Faculty Member</td>
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<td>Johnathan Olkowski</td>
<td>Senior Network Coordinator</td>
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<td>Contractor – Applications Software Analyst</td>
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IT Support Services

Findings and Observations:

- There are T1 lines to each college with the exception of Laney which has a fiber connection.
- Services that are centralized include Exchange, SARS, DNS, Web Services, and PeopleSoft ERP.
- The District has standardized on HP for servers, desktops, and laptops.
- Footprints is the help desk software utilized.
- The help desk is staffed from 8:00 a.m. to 6:00 p.m. M-F.
- Cisco VoIP, Mitel VoIP, and Mitel PBX are all in use for telephony.
- The District is in the process of implementing Moodle Course Management System (previously using Eudora).
- The system is currently being supported by a faculty member with reassigned time. The system is hosted offsite and is available 24X7. Student and faculty support is provided by the faculty member and one assistant. Moodle is fed by downloads from PeopleSoft.
- The website currently in use is hosted by IT and supported by a Sr. Network Coordinator and School Web Services.
- The current website was developed in 2000 by School Web Services (SWS).
- Problems have been experienced on the existing website including hacking and site unavailability due to system crashes.
- I-site was contracted with to develop a new website (along withEktron for content management). There were many committees setup and meetings took place, however the new website proved unstable in the test environment. As a result, SWS has been re-engaged to update the site.
- Two faculty members are also in the process of developing a new website using open source products.
- Network support is decentralized. The District staff support the WAN, Cisco equipment, firewalls, VPN etc. The Campus Network Coordinators maintain the LAN and technology residing at the college. Campus Network Techs report directly to the College’s Chief Instructional Officer and Indirectly to the District Director of Network Services. Additionally, there are other campus techs that report directly to the college and have no reporting relationship to the District.
- Colleges and specifically, the Campus Network Coordinators do not work cooperatively with District IT and oftentimes undermine the work and role of the District.
- Access control to the PeopleSoft system is handled by a member on the Network team. All accounts are tied to active directory.
- Faculty who don’t have email (approx. 700 part timers) had no access to Passport in early Fall to view their rosters and enter grades since their account is tied to active directory.
- The Associate Vice Chancellor of International Affairs was given the responsibility for Instructional Technology beginning October 2008.
- PeopleSoft is running on HP blades and boxes running ESX/VM. Windows OS is installed and SQL 2005 is the database. Modular firewalls are also utilized.

Recommendation: Develop a plan and timeline to migrate all users to a standardized telephone infrastructure – likely Cisco VoIP.

Running three telephone infrastructures typically causes a greater financial and support burden. The maintenance costs as well as the training needs will continue to escalate over time. Though the three systems currently interface, the potential for issues to arise is high and should be addressed. Consider developing a multi-year plan to phase out the Mitel PBX first, eventually leading to a single VoIP solution.

Priority: Med

Recommendation: District IT should have responsibility for supporting Moodle from a technical perspective.

Currently, Moodle is supported by a faculty member on release time serving as Instructional Technology Coordinator. He has done a herculean task of ensuring the system is available 24X7 through a hosted site (at a very reasonable cost). He also serves in the role of help desk support for Moodle. While the district has benefited greatly by his dedication, it is not reasonable to continue relying on a single individual - especially in light of the fact that the District has a goal of increasing online courses to encompass 25% of the schedule. As
such, it is recommended that District IT be responsible for the technical support of Moodle. An assessment should be conducted to determine the cost effectiveness of hosted versus District supported services. Even if the decision is to continue hosting off-site, District IT should be the contact for the hosting vendor. Additionally, the current District Help Desk should field first level Moodle support calls and only if necessary, escalate to the Instruction Technology Coordinator. District IT should work closely with the Associate Vice Chancellor of International Affairs and Instructional Technology to ensure satisfaction with delivery of related IT services.

Priority: Med

Recommendation: Ensure, in writing, that all stakeholders are aware of the current plan for the District and College websites and those responsible are held accountable for their part.

Different perspectives about the future of the website were expressed by various individuals. To ensure a shared understanding about the future of web services, it is recommended that the information be documented, and shared with all stakeholders. Additionally, those who have specified responsibility should be held accountable for their area.

The District should consider centralized support for all College and District websites. It is recommended that one FTE in District IT be charged with developing and maintaining the websites from a technical perspective. It is also recommended that the look and feel of the website be the responsibility of the Public Information Officer. The content creation and update should reside with the end users. Thorough training in the District's selected content management system should be delivered such that end users can easily update their information. The District may want to contract with CCBT to develop a comprehensive approach and plan for web services and delivery including a review of web services provided to students and faculty on Passport and determination of the delivery of content on the Intranet vs. the Internet.

Priority: High

Recommendation: Modify the reporting relationship of the College Network Coordinators to report directly to the District Director of Technology Services and indirectly to the College Business Officers.

It is recommended that support and responsibility for managing the network at the Colleges be centralized and that the IT organization be restructured to provide appropriate resources to maintain it effectively and with the highest level of reliability.

To clarify, it is recommended that the District IT Department be responsible for the following:
- Wide Area Network connections from the Colleges to the District Office for district-wide services
- DNS and DHCP services/servers at the Colleges as necessary
- Cable plant and infrastructure at the Colleges including the development and enforcement of consistent standards especially for new construction and remodeling projects
- Wiring closets, IDF's and MDF's at the Colleges
- Network switches, routers and other network equipment at the Colleges
- Support of a centralized Help Desk which is used to place work orders, assign them to technicians at the Colleges, monitor progress and communicate with end-users who placed the work order
- Continue to support PeopleSoft
- Support for email, calendaring and related services
- Coordinate development of IT training

The College IT staff will be responsible for maintaining all desktops including all computer labs and instructional applications. The College IT Leads will work closely with the District's IT Department for planning, communication and coordination of all information technology initiatives at each College and District-wide.

Priority: High
Recommendation: Ensure that all faculty (full and part time) have a user account with access to Passport.

The District should develop a process for creating (including authentication and authorization) and deleting user accounts in a timely manner. All faculty should have their account created on, or as close to the time of hire as possible. For all employees, a security definition pertaining to the individual's job classification should be assigned immediately to grant access to screens/reports/processes needed. A working session should be held with HR to determine the best approach for account creation/deletion.

Priority: High
Information Technology Organizational Structure and Staffing

Findings and Observations:

- IT does not serve in a support role for instructional technology.
- One Sr. Network Coordinator is responsible for load balancing, Cisco equipment, firewalls, switches, routers, and web VPN.
- One Sr. Network Coordinator is responsible for servers, VM ware migration, patching, upgrades, and the emergency alert system.
- One Sr. Network Coordinator is responsible for PC and printer installation and repairs.
- One Sr. Network Coordinator is responsible for the website, and is the liaison with facilities on Measure A project standardization.
- There is a long-time consultant responsible for infrastructure design and overseeing maintenance. The individual is also often called on at off hours for emergency system maintenance. The knowledge for the existing network infrastructure and the vision for upgrades reside with this individual. Additionally, he currently monitors the health of the PeopleSoft SQL database.
- A Telecom Systems Coordinator is responsible for district-wide phones. The incumbent works closely with a college support member for adds/moves/changes, and with vendors to report problems.
- There are two Help Desk Technicians (level 1 and 2). Additional training is needed for the incumbent in the level 1 classification.
- The Director of Applications is very well liked. He is known to be very knowledgeable and a hard worker. The Applications Director is a former Oracle employee and has been a full-time Peralta employee for approximately 16 months. It was reported by several members within and outside of IT that the incumbent tends to take most projects on himself and does not delegate assignments to staff members. However, given that staffing is so limited, it is hard to determine the underlying issue.
- There is only one permanent staff member on the PeopleSoft applications support team. He has been with the district for 5 years and provides technical support for the finance/purchasing application.
- One applications support member retired in December. Another applications analyst was hired to fill the student administration technical support role, but resigned due to job burnout despite being a knowledgeable employee.
- There are currently 6 contractors supporting the PeopleSoft system. A consultant through Openwave has been serving in the technical support role for 2 years. An independent consultant supports report writing and has been with Peralta for 2 years. An Aekco consultant has been serving in a Finance functional support role for one year. An Openwave HR functional consultant has been placed at Peralta for 3 years. Cyber has placed a DIA consultant. Finally, a consultant hired through Robert Half has been working on MIS reporting for 6 weeks.
- Two staff members from other areas (Admissions and Research) have been reassigned to the PeopleSoft implementation project. Both are trying to fill their original roles in addition to serving in functional support roles for PeopleSoft.
- The staff member reassigned from Admissions is responsible for creating security access roles and profiles in the Student Administration area in addition to responding to user support requests and the maintenance of the appointment registration process. The staff member reassigned from Research is helping run and compile the State MIS report. Summer 2008 MIS is still in the process of being run and prepared for submittal. The delays are a result of issues with the PeopleSoft extract as well as data integrity issues.
- Limited and non-permanent staffing was reported as a big issue.
- It was generally agreed to by all members interviewed (faculty, staff, and administrators) that additional IT support staff is desperately needed with the greatest need in the PeopleSoft support area.
- Limited staffing in other departments (e.g. Financial Aid and Admissions) also adds a greater burden on IT as subject matter experts are few.
- The Classified Union President indicated difficulties for her unit members due to rapid changes in management, lack of appropriate number of staff to accomplish the work of the district, and too much pressure placed on unit members to do more with less.

Recommendation: A new organizational structure with permanent Peralta IT staff should be deployed.

Attachment 1 provides a model organizational structure that would provide the most efficient and effective level of technology support for the Peralta Community College District. Attachment 2 provides general characteristics that should be included in the job descriptions for the various IT classifications being recommended.
**Priority: High**

**Recommendation:** Ensure ample cross training between positions to safeguard against loss of knowledge base in the event of employee absences or departures.

It is recommended that the District Network Coordinators have areas of specialty to cover expertise needed and to ensure accountability. However, all District Network Coordinators should be cross trained in one other member’s specialty. For example the Exchange and Telecom coordinators may be trained to provide back-up support to one another and the LAN/WAN and Servers/Patching Coordinators could be cross trained. The same approach should be taken with staff in the Applications Support category. Though each incumbent will have an area of specialty, cross training should occur between and among the teams. The System Administrator and Database Administrator should also be cross trained.

**Priority: High**

**Recommendation:** Consider working with CCBT to assess staffing levels and structures in other key student services areas such as Financial Aid and Admissions and Records. Administrative service areas such as Finance, Payroll and HR may also want to be considered.

Major changes in technology (such as the deployment of a new ERP system) frequently bring about a need to review current staffing and business practices. Oftentimes a shift is needed in how work is accomplished and an assessment of functions and positions in key areas could prove beneficial for Peralta.

**Priority: Medium**

**Recommendation:** Add the position of Information Security Officer/Network Architect to the IT Department to ensure that effective measures are taken throughout the District resulting in greater reliability, integrity and security of data related to students, employees and vendors.

More and more institutions are realizing the need for a Security officer. The liability posed by a security breach can result in great harm to the District from a financial perspective and can injure the District’s reputation. By engaging the Security Officer to also serve in the role of network architect provides the flexibility for the staff member to build the solid foundation needed and be responsible for its ongoing health from a security perspective. The position should work very closely with the Director of Technology Services to ensure Network design and newly added services are carried out meeting security standards.

**Priority: High**

**Recommendation:** Fill the position of Chief Information Officer as quickly as possible.

Given the many IT projects currently underway, it is imperative that the CIO position be filled quickly. The position should be at the Cabinet level. It is imperative that all Cabinet members, as well as the Board, provide full support to the individual to ensure success. It is recommended that the position be advertised on the statewide CISO listserv. Additionally, the District may want to consider including a seasoned CIO in the interview and selection process to improve the chances of selecting a candidate with the appropriate skills. This can be accomplished by working with CCBT.

**Priority: High**
Findings and Observations:

- There is not a current IT strategic plan.
- A plan for implementing wireless does not exist. Wireless access points are being deployed as requested.
- There is no standard telephony system. Three different technologies are currently deployed (Mitel PBX, Mitel VoIP, Cisco VoIP).
- There is no Webmaster classification. The Chancellor has communicated his desire to ensure a standard web presence for all Peralta Colleges. The District recently underwent a failed process with a vendor to create a new website. It is unclear where the responsibilities lie for web services.
- The IT budget is uncertain. Funds are not available in the appropriate GLs to pay existing contracts and services.
- Smartnet and other network equipment maintenance is either expired or soon to be expired. Funds have not been allocated to renew contracts.
- PeopleSoft HR and Finance were implemented by Oracle in 2005 within a 6 month timeframe. Though the implementation was successful, training, change management and business process review/reeengineering was not well conducted, leaving some major gaps.
- The Position Management module is sorely needed and is next on the list for implementation.
- Cyber was unsuccessful in implementing PeopleSoft Financial Aid due to the fact that each college has a separate FA ID. As a result, the District selected Regent for FA. The goal is to interface Regent with PeopleSoft. Due to problems experienced, there has been discussion of bringing back the legacy FA software (SAFE).
- Lack of IT involvement in business decisions that require technology support causes problems.
- It was reported that HR takes too much time to fill positions. A programmer job has been open for 6 months and no interviews have been conducted yet. It is believed that HR requires a certain pool size in order to begin the screening process. There is concern that by the time the few candidates are notified of an interview, they will have found employment elsewhere.
- A Faculty Business Readiness team was asked to conduct beta testing in Passport during Spring 2008. 3-4 faculty members from each college were involved. However, the feedback from faculty did not result in requested modifications.
- There was a major turnover of the faculty Beta team between Spring and Fall.
- It was reported by faculty members that communication was lacking throughout the implementation.
- The move to paperless (rosters, grade entry) was too swift and not transitioned. The faculty support moving to paperless but need appropriate processes and structures in place first.
- Online grade rosters don't have a grade book feature. Faculty are required to submit grade books at the conclusion of the semester. They are attempting to do this manually.
- It was reported by faculty that a comprehensive PeopleSoft Implementation plan was not developed. Specifically they referred to staffing and training plans, in additional to an alternate plan (plan B) in the event that technical problems should occur.
- System security is so stringent such that faculty and staff can't get their jobs done. For example faculty don't have access to view their assignments or retrieve budget information.
- It was reported that the online course schedule is not real time. Passport shows that the class is offered and there are seats available, but when the student attempts to register, they find that the class is at max, not offered, or cancelled. While verifying this information with IT, it was indicated that this is misinformation and that the course schedule is real time.
- It was reported that pre-requisite checking is not working on Passport. Tom however clarified that the District made the decision to not implementing pre-requisite checking for Fall 2006. This was a business decision - not a technical problem.
- Faculty indicated a need for access to additional screens as well as a transitional plan for going paperless.
- It was reported that the implementation teams are not meeting regularly.
- PeopleSoft application patch management was reported to be an issue. There is no support from the user community to test patches, thus patches have not been installed in production for quite some time.
- A lack of follow-through by management was reported. Too much was promised that could not be delivered.
- Some believe the District should have run parallel systems to ensure successful system migration.
- Educational Services reported that they have to do much more than expected, due to limited resources in IT.
There is a desire to implement CCCApply’s Spanish version, but it is felt that lack of IT resources is hindering the implementation.

It was also reported that CCCApply is problematic. Upon further conversation, it was discovered that Peralta has implemented the supplemental questionnaire page and invoked a rule requiring all students to complete additional questions related to financial aid – even if the student indicated no interest in financial aid.

It was reported that there is a problem with student refunds. Specifically, International students aren’t getting the appropriate refund based on their drop date. Additionally some students have been charged double for their enrollment fees.

A committee, chaired by VC of General Services to discuss and set standards for technology in classrooms , does not include the Associate Vice Chancellor who is now charged with Instructional Technology.

The District is in the process of implementing the PeopleSoft Business Intelligence solution. The solution came bundled with the initial PeopleSoft system purchase. Cyber recently recommended that BI be installed and set up so that the resource does not sit idle. It appears that a planning and prioritization process did not take place to assess resources and to determine if other more pressing needs exist. The District was previously using COGNOS BI.

Standards in many technology areas are not developed. For example, there are no quotas on email. As a result, users don’t manage their mailboxes and backups take excessive time. This will become more problematic as mailboxes continue to grow and possibly reach Exchange system limits.

It was reported that problems with FA check processing reside in multiple places. The colleges were not reviewing the applications in Regent and flagging the students who were packaged and should have been moved to PeopleSoft for payment. The Regent system did not have the rules built correctly to determine eligibility. Regent wasn’t given good specifications from the FA team to begin with and information related to eligibility kept changing. The colleges also could not agree to what the eligibility rules should be. Another problem resulted from students who did not have an address on file. If the address isn’t there, PeopleSoft cannot process payment. Minh is looking up addresses manually in CCCApply and updating PeopleSoft.

Recommendation: Establish a more formal information technology advisory structure to assist the District with planning, improving communications, developing standards and setting priorities. The focus of this group should be on College needs and requirements related to PeopleSoft, other district-wide applications, and support services. Active College participation is fundamental and a prerequisite to its success.

The committee should be co-chaired by the CIO and a faculty member or student services administrator. Agendas and notes from meetings should be posted on the Intranet and available to all staff throughout the District.

Priority: High

Recommendation: Develop a district-wide 5-year strategic technology plan.

Working with a district-wide technology advisory committee, establish a strategic technology plan that addresses all facets of technology including infrastructure, telecommunication, distance education, web services, and applications services. Each goal should include an estimated cost, and an indication identifying if funding is already budgeted or being requested. The plan should be approved by the Chancellor’s Cabinet and reported to the Board. The advisory committee should review the plan annually, update as necessary, and ensure progress is made toward the goals. This will ensure that stakeholders have an opportunity to provide input into IT priorities and are aware of the status of projects.

The District may want to engage in services with CCBT to provide assistance in the planning process.

Priority: Med
**Recommendation:** A thorough review of all PeopleSoft security classes and assignments should be conducted. An approval process should be put in place whereby the business area owners for Finance, HR/Payroll, and Student Administration are charged with approving all new requests for access to their respective areas.

To ensure that users have access to the functions within PeopleSoft required to conduct their job, and only those areas for which they have a need to know, an approval process should be instigated. Additionally, all current security classes and assignments should be reviewed to ensure appropriate access and controls for those with existing access.

*Priority: High*

**Recommendation:** If desired, move forward with the implementation of CCCApply in Spanish.

It was indicated that implementing the Spanish version of CCCApply was on hiatus due to lack of IT resources. Implementation of the Spanish version requires little to no IT support. Contact angela@xap.com to request the Spanish application. XAP will follow through with providing it. It is possible that the District will want to review rules and make minor modifications. For example a welcome email is automatically generated when a student submits an application. Peralta may want to translate the letter into Spanish and set up a rule whereby students flagged as completing the application in Spanish are sent the welcome message in the Spanish language. CCCApply is designed to accommodate most setup functions by an end user, not requiring District IT resources. If assistance is preferred, XAP can provide it at no charge.

*Priority: Low*

**Recommendation:** Review rules on CCCApply related to the supplemental questionnaire page.

It was reported that the CCCApply admissions application is considered very cumbersome. After further discussion, it was discovered that the college has a supplemental questionnaire regarding financial aid. A rule could be written such that only those who identify that they are interested in financial aid are required to complete the supplemental. If in-house knowledge about how best to do this is not available, contact angela@xap.com for assistance.

*Priority: Med*
### Consulting/Outsourcing

#### Findings and Observations:
- The District contracts with ExtraTeam to assist with network and infrastructure upgrades and support.
- Smart classrooms are outsourced to Tcom though standards are developed by a District committee.
- Wireless projects are outsourced to NetExperts.
- It was reported by the majority of those interviewed that Cyber consulting does not do a good job of sharing knowledge and handing off projects upon project completion.
- Cyber Consulting was used in the implementation of the Student Administration module.
- Many reported that they were unhappy about the District’s use of consultants. It was reported that long-term consultants are used rather than hiring district staff who will build history and have buy-in to the future of the organization.
- There appeared to be an understanding that the District cannot immediately eliminate all consultants and that a phased approach for reducing consultants is needed.
- Holding consultants accountable is challenging. When a breakdown occurs, it is difficult to determine where the responsibility lies since there are so many different consultants in the picture. For example, the Financial Aid project includes consulting from Regent (application provider), Cyber (application consultant), Evans (consultant), and RWD (change management consultant).

#### Recommendation: Begin the process of reducing consultants by hiring permanent Peralta staff.

Though most institutions use consultants for specified projects on a limited, short term basis, Peralta appears to have a higher than usual dependence on external consultants. The myriad of consultants results in a lack of ownership for projects within the District and in multiple approaches that are not always congruent. The fact that the District has been in flux with IT leadership (several changes in CIO and current vacancy in that position) results in an absence of oversight and management of the consultants. This has lead to less than favorable hand-off of projects that are claimed to be completed, and projects in flight that may not be in the best interest of the District at this time.

Once the CIO is on board, he/she should focus on reviewing all existing contracts with consultants and requesting a status report on the deliverables. The CIO should ensure appropriate hand-off of projects by consultants and transfer of knowledge to Peralta staff.

Fully staffing the new organization structure will take time. Once Peralta staff is hired, training will likely be necessary. The District should slowly migrate away from long-term consultants and to permanent Peralta staff. An immediate reduction to consultants is not recommended as there is currently a great deal of reliance on consultants who are conducting mission critical tasks.

**Priority: High**
Training

Findings and Observations:

- It was reported by IT staff that training and documentation is sorely needed.
- Faculty reported that though training was conducted in the Spring, many did not get trained.
- The training was a corno and not hands-on.
- Managers don't know how to run their own budget reports.
- It takes more keystrokes to complete a transaction on PeopleSoft in comparison to the legacy application.
- Grades are more "fixed". Faculty want the ability to back-date drops.
- Rules for Incomplete grades are tighter. More documentation is needed on what constitutes giving an Incomplete.
- It was reported that when a class reaches capacity, then a drop occurs, the system allows the newly freed space to be filled via online registration. This causes problems if the term has already begun because faculty hand out add cards based on seats remaining. This results in classes going over their maximums.
- There is less information available. Faculty don't have access to what they need.
- Faculty would like a faculty handbook, drop in training hours at strategic times during the semester, and hands-on training.
- A review of the document delivered to Peralta by change management consultant RDW shows that several information sessions were held. However more direct, continuous, hands-on training is still necessary.

Recommendation: Develop and implement a training program for PeopleSoft that will teach College staff what they need to know about the system to be able to more effectively perform their job functions.

PeopleSoft training was consistently identified as a need by faculty and staff. A new process for training should be developed District-wide for all employees who use the system. This training program should include the following characteristics:

- A commitment by the District and College management teams to require staff participation in PeopleSoft training
- A specific focus on what each employee needs to know about the system to be able to more effectively perform their job function
- Be a requirement for all new hires whose job will require the use of PeopleSoft/Passport including full and part-time faculty
- A methodology for providing "just in time training and support" for new features and/or functionality that is implemented within PeopleSoft
- Minimum IT skill levels should be determined for each position across the District, be included as a requirement in all position descriptions, and individuals only hired that meet or exceed these minimums.
- Training and support materials should be developed and should include clearly written "how-to's" that can be used by staff to determine how to accomplish specific functions in PeopleSoft - such as, how do I create a new course and add it to the schedule, how do I buy something, how do I determine what my account balance is, or how do I enter grades for a course I am teaching, etc.

Priority: Med

Recommendation: Ensure appropriate budgets for regular training of IT staff in both the applications and networking areas.

Technology changes at a very rapid rate. Staff skills can become stale quickly resulting in a need to revert to regular assistance from consultants. It is imperative that the District invest in staff training to ensure continued success.

Priority: Med
Recommendation: A center should be established on each campus whereby faculty can drop in to obtain just-in-time hands-on training for Passport.

Given that many of the tasks that faculty conduct on Passport are not done regularly, it is easy to forget the steps for accomplishing tasks. During key times in the year (beginning of term, census period, grade entry period), a lab should be staffed at each campus for specified hours whereby faculty can drop in for assistance. A staff member should be available to assist faculty.

Priority: High
Attachment 2

Job Classification Recommendations

Associate Vice Chancellor/Chief Information Officer - Augment most recent recommended job description with:
- Strong project management experience and skills.
- Good communication and presentation skills (include presentation exercise for the interview).
- Ability to develop and carry out a technology vision and plan that meets the needs of all colleges in the areas of instructional, administrative, and student systems.
- Excellent budget management skills.

Director of Administrative Information Systems - Redo current job description and include the following:
- Excellent people management skills.
- Experience implementing Enterprise Resource Planning (ERP) systems.
- Experience with PeopleSoft is desirable.
- Background in programming.
- Ability To:
  - Communicate complex technical issues clearly to non-technical users
  - Analyze complex technical problems and adopt an effective course of action
  - Analyze and define user problems and requirements and develop efficient, cost-effective systems solutions, while ensuring users understand the ramifications of the various system alternatives
  - Manage client server operations
  - Develop and maintain on-line databases and ensure integrity/security of applications and data; establish and maintain cooperative working relationships
  - Organize, plan, cost, and complete applications projects efficiently in accordance with District quality standards and budget constraints
  - Communicate effectively both orally and in writing
  - Establish and maintain effective working relationships
  - Train, evaluate, and provide work direction to staff

Director of Technology Services - Redo current job description and include the following:
- Establish and maintain cooperative working relationships.
- Develop and maintain interoperable network and telecommunications systems and ensure network and data security.
- Continuously evaluate new technologies as they apply to district needs.
- Analyze complex personnel and network telecommunications issues or problems, evaluate alternative, and make sound recommendations.
- Analyze and define user problems and/or requirements and develop efficient, cost-effective network systems solutions, while communicating options and ramifications to stakeholders.
- Install, troubleshoot, and repair LAN, WAN, and telecommunication hardware and software, and fiber and copper media.
Attachment 2

- Assist in developing and interpreting departmental policies and procedures, within District quality guidelines, and see that they are clearly communicated and carried out.
- Manage multiple types of servers, including E-mail, Web, Network Monitoring, Disaster Recovery, File, Print, and Database servers.
- Manage installation, upgrading and repair of local and wide-area network and telecommunication hardware, software, cabling and wiring.
- Ensure open communications between staff at colleges and District.
- Manage, assign, and schedule technical staff working at multiple locations.
- Organize, plan, cost, and complete network development projects efficiently in accordance with District quality standards and within given budget constraints.
- Communicate complex technology issues clearly either orally or in writing and make effective oral presentations.
- Supervise inventory of network hardware, software, and licensing.

Information Security Officer/Network Architect - New job description using job classification similar to that used by Contra Costa (see attached). Add:
- Plan, design, install, troubleshoot, and repair LAN, WAN, and telecommunication hardware and software, and fiber and copper media.
- Ensure college/district compliance with network policies, procedures and protocols across multiple systems.
- Monitor and fine-tune network and telecommunications performance.

Applications Support Analysts - Use existing classification. Augment with:
- Participate in the review and definition of functional areas, processes and procedures regarding requirements, organization and flow of data, methods and forms.
- Train and support users on installed software.
- Assist in design/ modification of business rules for software.
- Write and maintain user documentation.
- Higher education and PeopleSoft experience are desirable.

As the jobs are advertised, identify desirable experience in the business application being targeted (Student Admin., Finance, HR, Financial Aid, or Business Intelligence).

Programmer/Analysts - Create new job description. Include the following elements:
- Design, develop, troubleshoot, test, and implement custom programs and applications in the PeopleSoft system.
- Modify existing PeopleSoft programs and applications.
- Prepare and maintain documentation including the preparation of flowcharts, diagrams, coding, and other detail related to applications and programs in accordance with established procedures.
- Maintain communication with Applications Support Analysts and Help Desk Technicians to provide necessary training and support.
- Experience in systems analysis, software testing and validation, systems design and development, and applications support.
- Experience in SQL, Perl, Java server pages, xml and web development.
• PeopleSoft programming experience in an educational environment is desirable.

**System Administrator** - New job description using the characteristics below:

• Have excellent problem solving skills.
• Maintain knowledge base to quickly and correctly diagnose and correct system problems.
• Analyze system logs and identifying potential issues with computer systems.
• Introduce and integrate new technologies into existing data center environments.
• Perform routine audits of systems and software.
• Perform backups.
• Apply operating system updates, patches, and configuration changes.
• Install and configure new hardware and software.
• Add, remove, or update user account information, reset passwords, etc.
• Answer technical inquiries.
• Responsible for documenting the configuration of the system.
• Carry out system performance tuning.
• Ensure that the network infrastructure is up and running.
• Assist programming and application support staff in writing and debugging applications.
• Assist manager in evaluating new hardware and software products and in designing new systems.
• Administer access security for hardware and software.
• Develop and maintain network interface of host computers (servers) with LAN/WAN.
• Update and assemble control programs; develop and update interface programs; create backups.
• Create and maintain program libraries.
• Act as technical backup for Database Administrator.

**Database Administrator** - New job description using the characteristics below:

• Responsible for the administration of existing enterprise databases and the analysis, design, and creation of new databases.
• Design logical and physical databases. Coordinate database development as part of project team, applying knowledge of database design standards and database management system.
• Install new versions of DBMS software, application software, and other software related to DBMS administration.
• Configure hardware and software with the system administrator.
• Monitor and administer DBMS security including adding and removing users, administering quotas, auditing, and checking for security problems.
• Analyze the data stored in the database and tune system for performance and efficiency.
• Perform data modeling and optimization to take the most advantage of the I/O subsystem.
• Interpret and write complex SQL queries.
• Proactively monitor systems for optimum performance and capacity constraints.
• Establish standards and best practices for SQL.
• Interact with and coach programmers in Structured markup language scripting.
• Review project requests describing database user needs. Estimates time and cost required to accomplish project.
Attachment 2

- Attend specification meetings with project team workers to determine scope and limitations of project.
- Review and recommend definition of data as defined in data dictionary (information about data, including name, description, source of data item, and key words for categorizing and searching for data item descriptions.
- Determine and enter changes to data dictionary descriptions, including type, structure and intended use of data within system.
- Develop data model describing data elements and how they are used. Creates description to enable programmer-analysts to understand how programs should access data.
- Maintain databases according to internal guidelines and requirements specified by the database vendor.
- Maintain routine contact with the software vendors to keep the databases up-to-date with new and/or updated data and system and application software.
- Establish and maintain data backup procedures for all databases and application files.
- Administer access security to database tables including: adding/deleting users; controlling database login passwords; authorization access to tables and procedures as defined by staff positions.
- Support analysts by developing and maintaining additional database tables and ad hoc data tables.
- Act as technical backup to System Administrator and assists Systems Administrator with routine tasks.
- Perform regular database system performance monitoring and troubleshoot and resolve database-related problems.
- Support Application Support Analyst by assisting in coordination, running, and submittal of State and Federal reports (e.g. MIS, IPEDS).

District Network Coordinator - Use existing job description and augment with the following characteristics:

- Plan, design, implement and operate LAN, WAN, telecommunication hardware and software, fiber and copper media; provide technical advice and assistance on matters relating to the installation and operation of LAN and WAN and telecommunication systems.
- Provide technical advice and assistance on matters relating to the installation, operation, and support of computer systems including multiple networks, peripherals, telecommunications, and Internet.
- Plan, design, implement and operate personal computers, network servers, multiple networks, network peripherals, and telecommunications software and hardware, and fiber and copper media.
- Exercise high level problem solving skills and follow-through on assignments.
- Troubleshoot and/or debug network-related problems.
- Maintain network authorization infrastructure.
- Maintain network backup systems.
- Exhibit a positive attitude towards fellow workers and displays service orientation with customers.
- Work as a team player in a collaborative and supportive manner.
- Coordinate, conduct and participate in end user or peer training.
• Multi task several jobs at one time under sometimes stressful conditions.
• Use electronic test equipment and common small hand tools.
• Execute and communicate oral and written instructions.
• Comprehend technical manuals and instructions.
• Plan, Install, operate and manage local and wide area networks and telecommunication equipment.
• Install, maintain and repair telecommunications cabling.
• Install, maintain, and support network management software packages.
• Understand principles and theory of disaster-recovery design and planning including audit requirements, legal requirements, risk analysis, and recovery strategies.
• Understand concepts and principles of security equipment, such as firewalls, Access Control Lists, Intrusion Detection Systems and routers.
• Background in principles, theories, methods, materials, and equipment used in the design, installation, operation, and maintenance of telecommunications, and network technologies including peer-to-peer, client server, and stand alone operating systems, peripherals, applications, connectivity, protocols and topologies.

College Network Coordinator - Update qualifications based on current technology. Include:
• Maintain College servers according to District standards

Web Administrator – Create new job description and include:
• Design and develop the architecture, layout and functionality of District and College websites.
• Maintain, monitor, and prepare reports on the performance of websites.
• Troubleshoot and resolve operational issues of websites.
• Coordinate the gathering of information for placement on web pages.
• Review/edit information to be posted to a website and ensure that posted information is visually consistent with District established graphic standards.
• Update the content and layout of web pages.
• Advise customers on issues concerning content and presentation of information on the College/District websites.
• Recommend policies and procedures governing the posting of material on location websites.
• Design systems for data base generation, implement data base integration, format and present data, and monitor and maintain web-based data collection systems.
• Write and maintain on-line documentation.
• Serve as a technical resource for the implementation of electronic messaging and workflow functions.
• Evaluate the applicability of emerging information technology.
• Serve as a project lead when implementing new web-based technologies.
Contra Costa Community College District
Classification Specification

Information Security Officer

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<td>08/31/07</td>
<td>Management</td>
<td>1 of 1</td>
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**DEFINITION:** Under direction, administers and oversees the District’s information security program in a multi-college environment. The incumbent is responsible for developing information security policies and guidelines, growing the District-wide information security program, further developing the security architecture and advancing information security education for the District.

**PURPOSE:** Incumbents in this classification develop and implement a District-wide security program that supports the academic and administrative use of information technologies in a distributed client/server environment. Working in conjunction with technology staff and personnel at each site, the incumbent assumes overall responsibility for ensuring processes are in place to assess and monitor the security of the District’s computers, networks, and data; formulates and disseminates District standards for security, and reviews relevant policies and procedures in the context of these standards; educates, advises and trains staff on approaches for ensuring the security of District networks, systems, and data; develops crisis management procedures; assists with emergency response and disaster recovery; directly assists in resolution of serious incidents; leads projects concerning the evaluation and implementation of security-related technologies.

**EXAMPLES OF DUTIES/ESSENTIAL FUNCTIONS:** Duties/essential functions may include, but not be limited to, the following:

- Working with all District sites, formulate and disseminate District-wide standards for security and access control, and review relevant policies and procedures in the context of these standards;
- Provide leadership and participate effectively with Information Technology staff in network design and engineering to insure appropriate levels of security are in place and maintained;
- Assess the security of district-wide computers, networks, and data as well as personal workstations that access end or store data. Define and advocate “best practices” regarding security of data and systems. Promote security awareness;
- Participate in assessment and acquisition of information security hardware and software. Assist in setting priorities for use of resources. Ensure the implementation of features and products provide appropriate controls over systems and networks;
- Develop and document strategies to mitigate network attacks and breaches including but not limited to denial of service, network intrusion, worm attack, network spoofing, spam/phishing;
- Implement security and network management systems to track and monitor network disruptions and identify network anomalies which should generate alerts and response;
- Perform risk analysis of new technologies;
- Develop procedures to handle crisis situations. Organize task forces and coordinate investigations with District Police, Human Resources, and/or Internal Auditor;
- Advise senior executives on security issues and/or events. Keep District Police informed of technical developments in computer/network security;
- Coordinate the development and testing of information systems business continuity policies, plans, and procedures;
- On a continued basis, be cognizant of all state and federal laws and mandates regarding privacy and the protection of critical personal data;
- Monitor and report on College and District information security activities and compliance;
- Aggressively apply available technologies, processes and procedures to protect all district-wide data, Information and image storage;
- Perform other duties as assigned.
### Information Security Officer

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**MINIMUM QUALIFICATIONS:**

**Knowledge Of:** Computer Information security, including experience with internet technology and security issues. Experience with security planning and development of policies, as well as experience managing large scale projects.

**Ability To:** Plan and develop policies and procedures; analyze situations accurately and make independent decisions; establish and maintain effective working relationships with those contacted in the performance of required duties; communicate effectively verbally and in writing; coordinate collaborative initiatives to advance information security strategies for a large, decentralized organization; understand and implement cultural change related to technology with an awareness that developing strong security practices involves both technology and people.

**Education/Training/Experience:** BA or BS in Computer Science, Computer Information Systems, or related field. Experience managing large scale projects. Five years of progressively responsible relevant experience in an Information systems security environment offering technical and analytical support and leadership.

**Desired Qualifications:** Preference will be given to candidates who have a CISSP, CISA, CISM or other security certifications. Experience with business continuity planning, auditing and risk management.
I will assume we are still on for Tuesday, August 25 at 3:15 pm in the IT Conference Room.

The goal is to "research" information which I can include in the ACCJC Follow-Up Report.

The specific recommendation is as follows:

Financial Resources and Technology

The team recommends that the district take immediate corrective action to implement all appropriate controls and necessary MIS systems modifications to achieve access to a fully integrated computer information management system, including modules for student, financial aid, human resources, and finance, in order to assure financial integrity and accountability. All corrective action and system testing should be completed within two years and the governing board should receive regular implementation progress reports until project completion (Standards III.D.1.a, III.D.1.b, and III.D.2.a).

(1) My approach so far has been to include the 30 independent audit findings under this area since the Evaluation Reports done for each of the colleges speak at length about these 30 findings. I have information that Tom Smith has been providing the Board Audit and Finance committee. I suspect I will get more at the September meeting of that committee.

(2) A next approach would be to discuss how the four college business managers have been meeting since 2006 with an IT consultant to address PeopleSoft issues and needs. It is my understanding that Gary Perkins, the CIO at that time, set this process up.

(3) So it would be helpful to say what these meetings have accomplished in making the system workable and functional- what has been accomplished. It would be helpful to honestly say what still needs to be done- what still needs to be accomplished. However, in doing so, it will be most helpful if you can help me distinguish between what needs to be specifically done that is an IT issue and what specifically needs to be done that is a Business Practices issue.

Thanks to the four of you for being willing to give up some of your valuable time to help with responding to this recommendation.

Thanks.

Joseph
PeopleSoft System Issues

This document provides an overview of two types of PeopleSoft system issues at Peralta Community College:

1. Top issues that have been resolved in the last year.
2. Top issues that are still pending.

Accomplishments

1. The process for moving Student Financial data from the Student Administration system to the Financials system was not working. This issue has been resolved and the process is now mostly working. There are still a small number of transactions going to the wrong account. Also, all of the historical Student Financial data that had not been processed to the Financials system has been processed. This was a functional issue where setup data had to be edited and updated.

2. The Position Management module was implemented for the PeopleSoft HR/SA application.

3. The PeopleSoft Financials application was upgraded to the latest version of the software.

4. The Asset management module was implemented for the PeopleSoft Financials application.

5. Many minor patches and upgrades have been applied to all PeopleSoft application modules. These small patch releases are typically released on 3 or 6 month cycles from Oracle.

6. Existing queries were not showing up to users in PeopleSoft Financial application. This issue has been fixed. All existing useful queries have been identified and moved to FSPROD (the live production environment for the PeopleSoft Financial application).

7. There was a problem on Requisitions where a line entered as exempt does not get saved as exempt. This issue has been fixed in FSPROD.

8. A feature has been added to the Budget Transfer page which enables the users to check the available balance in a budget before the user attempts a budget transfer. This custom feature is currently being tested by the Business Managers in UAT (the user testing environment).

9. A new Requisition Approval History page was created that keeps track of requisitions and tells the user where the requisitions are at any given point of time. This custom feature is currently being tested in UAT.

10. Customizations have been added to the Vendors page as per the request of the Purchasing department.

11. Multiple PeopleSoft queries and Crystal reports have been developed and implemented into the production environments for all PeopleSoft modules.

12. Many requisition entry errors have been corrected in the FSPROD environment. This was a functional issue where data was entered improperly.

13. The MIS reports for state reporting on student data have been fixed and are working properly.
Current Top Issues

1. The issue must be fixed where some transactions from the Student Financials application are being processed into the incorrect account in the Financials application. This is a functional issue where setup data must be adjusted.

2. There is a need for an electronic personnel action form (ePAF) request and approval system. Right now personnel action forms are done on paper and routed manually. There is a 2 phase solution currently proposed:
   a. **Phase 1** - This short term solution would use a free Microsoft electronic document management product to get the PAF's online.
   b. **Phase 2** - Find a software product solution that enables tight PeopleSoft HR integration.

3. There are a number of outstanding minor patches and upgrades for all of the PeopleSoft applications.

4. The PeopleSoft SA/HR application needs to be upgraded to the latest version of the software during 2010. During 2010 Oracle will increase the price of support for the current version of the software.
Financial Management Issues:

- Posting of Payroll and Fringe Benefits on a monthly basis
- Electronic Personnel Action Forms
- Electronic Personnel Leave Forms
- Resolve negative budget transfers (allowing budget transfers when no budget is available)
- What is the administrative infrastructure?
- Lack of reports from the PS baseline
- Lack of written reports from programmers (including Management Financial Reports)
- Cost centers/activity (college and district) need detail reports, expenditure reports
- Roll up by cost center, fund, project reports
- The accounts receivable system is not supported and is not fully implemented (including fully reconciling the carry over balances, set up reconciliation processes and reports, etc.)
- Dissemination of information and implementation of the Position Control System
- Need for in-house programmers, rather than consultants

Consultants

- Jake Abrams
- Ram A – accounts payable; purchasing; writes queries
- Aaron – Easy Pass code writing
- Someone working with payroll