



**NORTH ORANGE COUNTY COMMUNITY COLLEGE DISTRICT
DISTRICT INFORMATION SERVICES
TECHNOLOGY PLAN
2011-2015**



Reviewed by Technology Advisory Committee 12-14-2010, 6-19-12, 6-18-13, 6-17-14; Updated Status 12-13-2011, 1-4-2012, 4-15-2013, 11-15-2013, 6-3-14, 2-2-15

Strategy #1: Provide the Best Technology for the Best Value

Information Services can best accomplish this goal by focusing on the following objectives:

- ✓ Implementing technologies that can directly impact student success,
- ✓ Exploring new and better technologies to meet the needs of our staff, and
- ✓ Leveraging the assets we already have including our people and systems to better serve our students and staff.

GOALS	STATUS	ACTIVITIES	DISTRICT-WIDE 2014-17 STRATEGIC PLAN/ 2014-15 CHANCELLOR GOAL (S) ADDRESSED
Leverage our people asset to improve student success	<p>Training:</p> <ul style="list-style-type: none"> • Educause – Deborah, Mike, Fred, Peter, Tom • CCC Banner Users Group – Deborah, Hani, Adam, Mike, Jason, Richard, Brad, Fred, Chris, Tom • Ellucian Live – online for all staff • Gartner Business Intelligence – Deborah • Cisco Certification – Boaz • CENIC – Boaz, Deborah • VPLS Training – Boaz • Library Users – Richard • Groovy, Grails Banner XE – Brad • CISO Certification – Fred, Peter • SSSP Implementation Summit – Fred • ACCJC – Deborah • IPEDS Keyholder Training/Clearinghouse Academy – Beverly <p>Collaboration:</p> <ul style="list-style-type: none"> • Single Signon • NOCCCD Website update; portal replacement • Student Success initiatives including Ed Plan, Appointments • Online Catalog/Schedule • Print Shop • District wide DNS • Wireless Anaheim • Imaging • Data Warehouse (researchers) • Telecommunications Standards update • HR Revitalization 	<ul style="list-style-type: none"> ➤ Provide staff training opportunities for: <ul style="list-style-type: none"> • New technologies • Mobile solutions • Testing strategies to streamline testing efforts • Information Security ➤ Investigate the use of collaboration tools such as Sharepoint and myGateway for use across the district; help employees learn to use them for improved service to students and better productivity 	<p>Strategic Plan:</p> <p>District Objective 1.1 District Objective 1.2 District Objective 1.3 District Objective 1.4 District Objective 2.1 District Objective 2.2 District Objective 3.1 District Objective 4.1 District Objective 4.2 District Objective 4.3</p> <p>Chancellor’s Goals:</p> <p>Increase Student Success</p> <p>Organize & Expand a District-wide Staff Development Program</p>

GOALS	STATUS	ACTIVITIES	DISTRICT-WIDE 2014-17 STRATEGIC PLAN/ 2014-15 CHANCELLOR GOAL (S) ADDRESSED
Leverage our systems asset to improve student success	<p>Wireless:</p> <ul style="list-style-type: none"> In progress; completion March 2015 <p>myGateway:</p> <ul style="list-style-type: none"> Investigating new products <p>Staff Assignment Sheets:</p> <ul style="list-style-type: none"> Payroll project analysis continues; Online timekeeping in progress <p>Imaging:</p> <ul style="list-style-type: none"> Document imaging system analysis underway <p>Mapper:</p> <ul style="list-style-type: none"> Payroll process analysis begun to address Payroll/Benefits; ACA reporting implementation underway <p>Curricunet:</p> <ul style="list-style-type: none"> No progress with vendor <p>Student Success Initiatives:</p> <ul style="list-style-type: none"> Degree Works implementation in progress; live Spring 2015 SARS/Bookit – Regroup interface completed; investigating common appointment system <p>Network Upgrade</p> <ul style="list-style-type: none"> Bond Measure funding to upgrade network to 10Gb and provide District-wide Wireless <p>Other</p> <ul style="list-style-type: none"> Implement Enterprise Scheduler to streamline Financial Aid processes Implement Student Verification and Get SAP to improve service to Financial Aid students 	<ul style="list-style-type: none"> Investigate wireless alternatives for the Anaheim campus to improve student access to services and improve staff productivity Implement myGateway 2.0 with the following objectives: <ul style="list-style-type: none"> Unify communication for better student/staff collaboration Consolidate items that are replicated across district servers Blend off-campus and on-campus worlds for students so they are encouraged to use the system Provide mobility of system functions Establish communities for learning and students success Improve security Improve content delivery that will assist students and staff Automate staff assignment sheets for better efficiency Provide a comprehensive and integrated Imaging strategy across the district to improve records retention and access for Board minutes/agenda items, Finance documents, Human resources documents and Student documents Provide self service solutions for International Students including SEVIS and CCCApply Retire Mapper by moving the Health Sciences, Payroll and Benefits components to Banner to eliminate redundancy and improve staff/student efficiency Integrate Curricinet with Banner for streamlined tracking of courses from creation to Chancellor Office approval Implement Students Education Plan/Degree Audit to improve student success Implement Student Planner/Calendar for registration (shopping cart style registration) Upgrade the Network by 2017 	<p>Strategic Plan:</p> <p>District Objective 1.2 District Objective 1.3 District Objective 4.3</p> <p>Chancellor’s Goals:</p> <p>Increase Student Success</p>

GOALS	STATUS	ACTIVITIES	DISTRICT-WIDE 2014-17 STRATEGIC PLAN/ 2014-15 CHANCELLOR GOAL (S) ADDRESSED
<p>Encourage innovation and explore new and better technologies that can make our student/staff more successful</p>	<p>Testing:</p> <ul style="list-style-type: none"> Created test environments for all applications <p>Lecture Capture:</p> <ul style="list-style-type: none"> Not economically feasible at this time <p>Unified Communications:</p> <ul style="list-style-type: none"> Awaiting CENIC VoIP offering details <p>Mobile:</p> <ul style="list-style-type: none"> New apps due out February 2015 including payment gateway <p>One Card System:</p> <ul style="list-style-type: none"> No work done on this project; no user interest <p>Textbook Alternatives:</p> <ul style="list-style-type: none"> Completed <p>Anti-virus/Malware:</p> <ul style="list-style-type: none"> Completed <p>Communication with Students:</p> <ul style="list-style-type: none"> Regroup implementation completed <p>Student Success Act of 2012:</p> <ul style="list-style-type: none"> Comevo (Orientation) completed, DegreeWorks (Ed Plan) Spring 2015, SARS/BookIT (Appointments) implementations in progress <p>Video Conference:</p> <ul style="list-style-type: none"> Completed <p>Other:</p> <ul style="list-style-type: none"> Cloud applications for ACA, Financial Aid, Health Centers, Online Tutoring, Online Employment Application in progress 	<ul style="list-style-type: none"> ➤ Explore better automated testing for system upgrades to improve staff efficiency and reduce errors ➤ Expand use of Virtualization using district-wide standards for: <ul style="list-style-type: none"> Desktops; staff and student Servers Network ➤ Explore lecture capture tools for improved instruction ➤ Investigate Unified Communications alternatives once the CENIC pilot project is completed ➤ Develop mobile applications for improved student self service for: <ul style="list-style-type: none"> Tablet Devices Smart Phones Laptops/netbooks ➤ Expand one-card services to minimize the number of cards a student needs ➤ Implement textbooks alternatives which decrease student costs including: <ul style="list-style-type: none"> Text rentals E-texts Free texts ➤ Investigate and select desktop protection for anti-virus/malware to improve reliability of systems ➤ De-invest in e-mail; re-invest in other technologies to move effectively communicate with students ➤ Upgrade Video Conference Capability ➤ Investigate Internet Broadcast Capability 	<p>Strategic Plan:</p> <p>District Objective 1.2 District Objective 1.4 District Objective 2.1 District Objective 2.2 District Objective 4.3</p> <p>Chancellor's Goals:</p> <p>Increase Student Success</p>

Strategy #2 : Provide High Quality Customer Service

Information Services can best accomplish this goal by focusing on the following goals:

- ✓ Improving the responsiveness to user (staff and student) needs to aid in their success, and
- ✓ Collaborate across the district to provide better service, eliminate redundancy and improve user satisfaction.

GOALS	STATUS	ACTIVITIES	DISTRICT-WIDE 2014-17 STRATEGIC PLAN/ 2014-15 CHANCELLOR GOAL (S) ADDRESSED
<p>Improve responsiveness to user needs</p>	<p>Self Service:</p> <ul style="list-style-type: none"> • Developing common system for appointment scheduling; Regroup implementation completed • Online employment application in progress • Online Catalog/Schedule system selection in progress • Researcher data warehouse in progress • DegreeWorks in progress <p>Distance Education:</p> <ul style="list-style-type: none"> • Improved process to load student in Blackboard in progress <p>Emergency /Informational Notifications (students/staff):</p> <ul style="list-style-type: none"> • Regroup implementation completed 	<ul style="list-style-type: none"> ➤ Increase use of self service applications for: <ul style="list-style-type: none"> ○ Appointments ○ Financial aid ○ Employee payroll/personnel forms ○ Other applications ➤ Improve delivery of Distance Education through a cost effective consolidated system ➤ Implement notifications to students and staff for informational messages (see Disaster Preparedness below) 	<p>Strategic Plan:</p> <p>District Objective 1.2 District Objective 1.3 District Objective 1.4 District Objective 4.3</p> <p>Chancellor's Goals:</p> <p>Increase Student Success</p> <p>Stability of the Budget</p>

GOALS	STATUS	ACTIVITIES	DISTRICT-WIDE 2014-17 STRATEGIC PLAN/ 2014-15 CHANCELLOR GOAL (S) ADDRESSED
Collaborate across the district to improve service to the end user	<p>Collaboration Across District:</p> <ul style="list-style-type: none"> • Districtwide workgroups continue working on: <ul style="list-style-type: none"> ○ Single Sign On ○ Active Directory ○ Centralized Authentication System ○ Shared DNS services <p>Technical Advisory Committee:</p> <ul style="list-style-type: none"> • Incorporating Distance Education component <p>Network:</p> <ul style="list-style-type: none"> • Wireless connectivity improvements be implemented District-wide • Updating Telecommunications standards • Planning for network refresh <p>Parking Permit:</p> <ul style="list-style-type: none"> • Completed <p>Data Warehouse/Key Performance Metrics:</p> <ul style="list-style-type: none"> • Project underway to improve ARGOS and develop Data Warehouse • Creation of common Institutional Effectiveness Reporting Tools using ACCJC format completed <p>Cloud Applications:</p> <ul style="list-style-type: none"> • District to move to Office 365; Cypress completed; District/SCE in progress • eLumen for SLO processing at Fullerton completed • Online employment application in progress <p>County Payroll Integration</p> <ul style="list-style-type: none"> • Payroll project implementation begun 	<ul style="list-style-type: none"> ➤ Improve collaboration across the district I.S. and ACT units by sharing expertise and networking ➤ Use the newly formed Technical Advisory Committee to: <ul style="list-style-type: none"> ○ Improve communications on technology strategies across the district ○ Develop standards for improved efficiency across the District ○ Create a Technology Plan for the district based on the Educational & Facilities Master Plan and campus technology plans ➤ Consolidate network equipment into fewer devices i.e. combined firewall, VPN etc. where practical ➤ Use common network vendors across district to contain costs ➤ Streamline parking permit process across district for cost savings and student convenience ➤ Explore best way to implement single sign-on for all district applications (i.e. InCommon, LDAP, etc) ➤ Create a central data warehouse for research to support data- driven decision making ➤ Implement a dashboard of key performance metrics ➤ Leverage cloud applications for cost containment and ease of access for students/staff including: <ul style="list-style-type: none"> ○ Email across the district ○ Shared applications such as office appliances ○ Virtual labs ○ Storage ➤ Improve integration of Banner with county applications 	<p>Strategic Plan:</p> <p>District Objective 2.1 District Objective 2.2 District Objective 4.3</p> <p>Chancellor's Goals:</p> <p>Increase Student Success</p> <p>Continue with Accreditation Compliance</p> <p>Implement Master Plan</p> <p>Stability of the Budget</p>

Strategy #3: Plan for the Future

Information Services can best accomplish this strategy by focusing on the following goals:

- ✓ Plan for the refresh of technology to insure current/relevant systems,
- ✓ Respond quickly to changes in the environment, and
- ✓ Prepare for emergency and business interruptions.

GOALS	STATUS	ACTIVITIES	DISTRICT-WIDE 2014-17 STRATEGIC PLAN/ 2014-15 CHANCELLOR GOAL (S) ADDRESSED
Maintain current and relevant systems	<p>Technology Upgrade and Refresh:</p> <ul style="list-style-type: none"> • Upgrades to all systems completed <p>Standards:</p> <ul style="list-style-type: none"> • Update to Cabling Infrastructure Standards in progress • TCC Developed the following standards: <ul style="list-style-type: none"> ○ Cloud Solution Security Guidelines <p>Social Media:</p> <ul style="list-style-type: none"> • Completed <p>Open Source:</p> <ul style="list-style-type: none"> • Investigated library and others; determined not to move in this direction due to security and other concerns • Mobile completed 	<ul style="list-style-type: none"> ➤ Plan for technology upgrade and refresh to insure systems are current and usable ➤ Upgrade systems before end of life declared by vendor ➤ Develop standards to create a district wide environment whereby resources can be shared for: <ul style="list-style-type: none"> ○ Virtualization ○ Virtual desktop ○ And other technologies ➤ Leverage social media for student/staff benefit ➤ Investigate Open source alternatives for existing and new systems such as the Library System 	<p>Strategic Plan:</p> <p>District Objective 1.2 District Objective 2.1 District Objective 4.3 District Objective 5.1</p> <p>Chancellor's Goals:</p> <p>Increase Student Success</p> <p>Stability of the Budget</p>

GOALS	STATUS	ACTIVITIES	DISTRICT-WIDE 2014-17 STRATEGIC PLAN/ 2014-15 CHANCELLOR GOAL (S) ADDRESSED
Disaster Preparedness/Business Continuity	Backup: <ul style="list-style-type: none"> • Funding for offsite backup received; evaluation solutions Emergency Planning Activities: <ul style="list-style-type: none"> • Regroup implemented Data Protection: <ul style="list-style-type: none"> • Awareness via presentations (Joint Senate/UF) and training (Banner Navigation/ARGOS) 	<ul style="list-style-type: none"> ➤ Investigate off-site co-location facility for hot backup ➤ Participate in district Emergency planning activities and offer technology assistance for that effort ➤ Establish and communicate best practices to protect staff and student data stored on district computers ➤ Implement effective emergency notification systems (see Improve Responsiveness to User Needs above) 	Chancellor's Goals: Stability of the Budget
Respond to environmental changes	Carbon Footprint: <ul style="list-style-type: none"> • All but one server moved to virtual environment Alternative Energy Sources: <ul style="list-style-type: none"> • None found to date 	<ul style="list-style-type: none"> ➤ Monitor carbon footprint of data center and equipment ➤ Investigate alternative energy sources 	Chancellor's Goals: Stability of the Budget

Strategy #4: Meet Legal and System Requirements

As an institution of higher education, NOCCCD must adhere to the law and requirements put forth by other outside agencies. The objective is compliance with these mandates to insure a sound education for our students.

GOALS	STATUS	ACTIVITES	DISTRICT-WIDE 2014-17 STRATEGIC PLAN/ 2014-15 CHANCELLOR GOAL (S) ADDRESSED
Meet legal mandates and obligations	<p>Records Retention:</p> <ul style="list-style-type: none"> Expanding use Imaging in Health Centers; Human Resources, etc. <p>Red Flag & Peer-to-peer Compliance:</p> <ul style="list-style-type: none"> Policies and processes in place; completed <p>Accreditation:</p> <ul style="list-style-type: none"> Institutional Effectiveness complete <p>Security Awareness:</p> <ul style="list-style-type: none"> Awareness via presentations (Joint Senate/UF) and training (Banner Navigation/ARGOS) Cloud Solution Security Guidelines developed <p>Accessibility:</p> <ul style="list-style-type: none"> Awareness via presentations (Joint Senate/UF) Incorporating in new Website design/development <p>PCIDSS:</p> <ul style="list-style-type: none"> Completed annually 	<ul style="list-style-type: none"> ➤ Review record retention strategies when implementing Imaging solutions for compliance ➤ Meet requirements of “Red Flag” legislation to insure privacy of students and staff ➤ Implement peer-to-peer compliance strategies ➤ Implement systems in such as way as to make e-Discovery easy ➤ Provide assistance in meeting Accreditation requirements ➤ Establish a security awareness program for end users ➤ Review systems for compliance with accessibility requirements ➤ Work with areas throughout the district that accept payment cards and assure that Payment Card Industry Data Security Standards are met. 	<p>Strategic Plan:</p> <p>District Objective 1.2 District Objective 1.4 District Objective 2.1 District Objective 2.2 District Objective 4.3</p> <p>Chancellor’s Goals:</p> <p>Increase Student Success</p> <p>Continue with Accreditation Compliance</p> <p>Maintain Financial Stability</p>