Division of Library and Information Services
Assessment of Initiatives, Fiscal Year 2011

CIO/Divisional

1. LIS Policy Framework	<u>Complete</u>. LIS in consultation with the Information Technology and Services Committee conducted an intensive review of all policies pertaining to the division's services in the fall of 2010 and the use of information resource by the campus community. The revised policies have been integrated into the college's personnel manuals and policy statements.
2. Identity management	<u>Scope redefined</u>. The division decided to pursue this initiative in the context of the review of policies referenced in the preceding initiative rather than pursue funding for a commercial identity management tool.

Enterprise Systems Department

1. College portal analysis	<u>Scope redefined</u>. The portal analysis was scheduled to be completed in July 2011. With the arrival of the Executive Director of Marketing and Communications, the scope of this analysis shifted to include a CMS system. This has delayed the completion of this initiative as the scope has increased. The college has a unique opportunity to select a system that can both support the external and internal college web site presence. Staff members are analyzing technical solutions that will provide support for the college web site, portal, and mobile presence. This expanded analysis is being completed by staff in LIS and Marketing and Communications. It is expected that the analysis will be completed by the end of the 2011 calendar year. A project plan and budget will be submitted for VP review in January 2012.
2. Replace hardware for core systems	<u>Complete</u>. This was completed successfully in November 2010. System performance, storage, and redundancy were significantly improved. Staff members involved architected a solution that took advantage of state-of-the-art technologies to improve overall system performance while reducing the economic and environmental footprint of the hardware used to support our ERP systems.
3. Mobile computing analysis	<u>Complete</u>. The mobile computing analysis was completed in the fall of 2010 by a cross functional team involving staff from several divisions. With this analysis complete, the team recommended a mobile platform for the college's first mobile application. The Dickinson Mobile application was launched in April 2011.
4. Enterprise open source support analysis	<u>Complete</u>. This analysis provided staff the opportunity to explore the methodology and technologies we use to support open source products at Dickinson. It was determined that the technology stack selected to support open source products should closely follow what the majority of community users have chosen. This will allow staff to participate and contribute in the open source community while taking advantage of the contributions of others.

	A result of this analysis is the decision to re-deploy Moodle in a LAMP or WIMP environment. LIS expect to deploy and upgrade Moodle during the Summer of 2012.

Infrastructure Systems Department

1. Replace Banner server infrastructure	<u>Complete</u>. The existing HP UNIX RISC based systems were replaced with Windows Server systems. Two physical servers were implemented for the production databases and two virtual servers were implemented for the production application. A virtual development application server and development database server were built and placed in the HUB switch room to provide for site diversity and failure recovery. Replacing the HP systems enabled the college to realize a savings of $20,000.00 per year in hardware support cost.
2. Support for LAMP environment	<u>Complete</u>. A production LAMP environment was implemented on a physical server and is currently being utilized by IMS in support of Itech. A development environment was implemented on a virtual server.
3. Data backup and recovery solution	<u>Complete</u>. Department researched and recommended several options to replace our current tape library system. After consideration and analysis it was decided to replace the current library system with a new LTO5 tape library. This system will be implemented and activated before the start of the spring semester.
4. Campus cable TV infrastructure analysis	<u>Complete</u>. Infrastructure Systems did not make any recommendation for change to the setup or programming of the campus cable TV system during this FY.
5. Exchange 2010 upgrade	<u>Complete</u>. The Exchange 2010 upgrade was initially implemented for staff, faculty and students at the very end of FY2010 soon after Commencement. Multiple exchange servers were implemented, significant storage space increases where implemented and the systems were installed in both the SC server room and HUB switch room to meet site diversity and recovery requirements. A major update to Service Pack 1 (SP1) was implemented in FY11.

Instructional and Media Services Department

1. Cross curricular support for GIS	<u>Complete</u>.
	
	Outcome: Develop at least two projects in each division using spatial technologies.
	
	Spatial technologies have been incorporated into courses in the following classes:
	
	1) Div 1 (Humanities)
	    a. Chris Francese – Google Earth Maps/iMovie tour for blog
	    b. Sarah Sherwood – ARCH 300 (Archaeological Method & Theory) GIS Lab project
	       Developed a GIS-based lab exercise for Sarah that allowed students to analyze a prepared data to provide specific recommendations for the management of cultural resources in a defined project area.
	2) Div 2 (Social Sciences)
	    a. Jim Hoefler (POSC) – "Quality of Death" website
	       Developed a map database for Jim that allowed him to prepare a web map displaying the "comparative performance" of 17 countries in Western Europe on a number of variables related to palliative care, independent of geographic size.
	    b. John Osborne – Historical Carlisle Project
	3) Developed a GIS Server-based historical map of 1860 Carlisle that allowed students with no GIS experience to quickly use mapping and database techniques for historical analysis
	    a. Helen Takacs – IB&M 100 project
	       Developed a GIS-based lab exercise for Helen that allowed students to analyze a prepared data to develop specific recommendations for selecting a suitable site for a retail restaurant, based on spatial criteria
	    b. David Commins (HIST) – Created a set of historical and contemporary maps of the Persian Gulf region for a textbook that David was writing.
	4) Div 3 (Sciences)
	    a. Candie Wilderman – ENST 131 course (Introduction to Environmental Science)
	       Developed a watershed database and GIS map project focused on the Conodoguinet and Yellow Breeches creeks in Cumberland County, PA, for student to examine the relationship of rock type and sampled water chemistry
	    b. Marcus Key (ERSC) – GIS and Paleontology project
	       Developed a technique for a paleontology project that allowed the use of GIS for analyzing the area extent and structural formations of a colonial organism called a byrozoan using scanned images of very thin cross sections.
	    c. Tim Wahls (COMP) – Farm Database Project
	       Collaborated with Tim and his students to design and construct a

	spatially-enabled database for the Dickinson College Farm that provided Matt Steiman (Asst. Farm Manager) with an improved capability for recording planting and harvest data during the 2011 growing season

2. New Media literacy program and modules	Complete.
	
	Outcome: A standard catalog of training workshops and classroom presentations for new media applications.
	
	The following training modules have been developed:
	
	1) Language Learning
	    a. Language Lab Intro (Can8, Antidote, Online Dictionaries) + Training Outline
	    b. Language Exchanges (Skype, Mixxer) + Training Outline
	2) Writing
	    a. Storyboarding using Comic Life + Training Outline
	    b. Digital Storytelling (Variety of platforms-text based, image, audio, video) + Training outline
	    c. Multimedia Presentations (Prezi & Vuvox)
	    d. Blogs (WordPress) + Training Outline
	3) Audio
	    a. Podcasting (Audacity) + Podcast Training Outline
	4) Teaching Tools
	    a. Smart Classroom & Student Response Systems (Smart Technologies, Clickers, Document Camera) (outline included in link)
	    b. Get the most out of Moodle
	    c. Research and Organizational Tools (Google Reader, Delicious,Google Docs/Forms,Doodle,Survey Monkey) + Training Outline
	5) Video
	    a. Intro to video editing (IMovie) + Training Outline
	    b. Intro to Equipment (Video equipment)
	    c. Quick and Easy Video (Flip to Moodle or YouTube
	    d. Advanced video editing (Final Cut)
	    e. Video Shooting Techniques (equipment)
	6) Visualization
	    a. Games as Simulations (Variety of platforms-Inform7, Civ IV, GlobalSim, etc)
	    b. Geographic Information Systems (GIS)
	7) Social Networking
	    a. Social Networking for Classes, Organizations & Departments (Twitter, Facebook, Google+) + Training Outline

3. Web 2.0 tools across the	Complete. Outcome: Determine a baseline of classroom use of Web 2.0 social and

curriculum	collaborative technologies (e.g. Twitter, iGoogle, Google Docs, Blogs, Wikis, flickr, del.icio.us, Diigo, YouTube,podcasting). Work with faculty to provide more Web 2.0 oriented alternatives for traditional classroom projects. The goal is to integrate Web 2.0 projects in 20 new courses in FY 2011.
	
	The following 20 projects were new in FY 2011.
	
	1) Skype, Mixxer - students practice with native speakers via Skype
	    a. Span, 3 sections of 104 and 116
	    b. Russ, 3 sections 104, 200 and 360 (one section each Duzs, Chernysheva and Mukhortova)
	2) Google Reader
	    a. Beaudry: Fren 245.01 - Students keep track of current events in France and read shared items from their professor.
	
	3) Social Networks - Twitter, Facebook
	    a. Aldrich: Span 231.03 - Students choose a poet then follow and publicize their work.
	4) Audio/Podcasts with Audacity
	    a. J. Ball: Hist 272 - Atlantic Slave Trade - http://blogs.dickinson.edu/atlanticslavetrade/
	    b. Merwin: RELG 206-01 -Great Secular Jews in History- http://blogs.dickinson.edu/secularjewsinhistory/
	    c. Bartlow/Brylinsky: WGST 300-01 - Ecofeminism - http://blogs.dickinson.edu/ecofeminism/what-is-ecofeminism-podcasts/
	5) Blogs, Blogging
	    a. Bowen: Educ 352-01 - Blog discussion about reading and writing, http://blogs.dickinson.edu/bloggingaboutwriting/
	    b. Deena Parmalee: SP-HIST-211.02-2569-American Indian History Since 1815 - Blog discussion - http://blogs.dickinson.edu/nah/
	6) Video
	    a. Lullo: Arth 205 - 20th Century Art in China- IMovie-new- http://blogs.dickinson.edu/introartsofasia/
	    b. Webb: FYS - Science Friction: Dystopian Visions-IMovie-new
	    c. Humphreys: Chem 131 (3 sections) - IMovie- http://www.youtube.com/user/dickinsoncollegechem
	    d. Skaggs: THDA 304 Applied Choreography - Video Composition: use video to create their compositions and post them to YouTube for Critique
	7) Collaborative Writing
	    a. Poulton: INBM240 - Google Docs in Marketing
	8) Wiki
	    a. Ed McPhail SP-ECON-496.02-2421-History of Economic Thought

	http://wiki.dickinson.edu/index.php/Economics - students created wiki page on a topic b. Nicky Tynan SP-ECON-222.01-2378-Environmental Economics http://wiki.dickinson.edu/index.php/Environmental_Economics_Sp_11 - students created wiki page on a topic
4. Mobile technologies for Global Education	Complete. Outcome: At least one class or program will include student projects using mobile and/or GPS-enabled devices to collect content related to their travel abroad. 1) The Nagoya summer program used geotagging and an augmented reality application (Layer) via mobile devices to add content to a blog. The results were presented in the following Educause paper: http://goo.gl/nTqb9

Library Services Department

1. Respond to self study and external review	<u>Complete</u>. ***Description:*** Following the library's ten-year self study and external review, it is our objective to analyze the report in order to develop next steps and adjust priorities. From this data, along with relevant numbers from the MISO surveys, the survey of college seniors, and the report of the external reviewers, we will be better informed in order to meet campus expectations and align our efforts with strategic priorities. ***Outcome:*** Written response to external report to APSC. ***Results:*** Following dialogue with APSC, the Library managers revised goals based on recommendations and user survey data.
2. Forum for campus wide communication	<u>Complete</u>. ***Description:*** One key recommendation from the external reviewers was for better channels of communication with faculty. While faculty report strong satisfaction with the communication through the library liaison program, there are no structured opportunities for dialogue with library managers and for input in advance of major decisions involving library services, programs, and resources. The development of programs to enhance these opportunities is a priority. ***Outcome:*** Developed model for a faculty roundtable program; proposal to ITS committee for restructuring to include library services; meetings with academic departments by library managers; library annual report to campus will be fall Cartouche.

	Results: The implementation of faculty roundtables was explored and it was determined that there was not sufficient interest and availability on the part of faculty. A departmental approach was deemed preferable. Between the fall 2010 and spring 2011 semesters, the library managers met with faculty members in American Studies, Biology, Spanish, and Political Science. Reports with recommendations were provided to the liaisons. Follow up has included changes in ordering procedures, demonstrations of library services, and improvements in communication. The library subcommittee of APSC was established (in lieu of structuring ITS committee to include the Library) and met monthly. The fall 2010 issue of Cartouche presented the annual report for the library.
3. Assessment management program	<u>Complete</u>. ***Description:*** Library projects, activities, programs, and resource use can provide critical data for assessment and planning purposes. Information gathering of diverse data from myriad sources is challenging. Capturing, recording, analyzing, organizing, archiving and reporting that data in a more coherent fashion, on a regular schedule, will serve as a more consistent and dependable foundation for library planning. ***Outcome:*** To assure that data is gathered on a regular schedule, completed, analyzed, reported and archived appropriately, we will develop a schedule reflecting which data should be collected regularly; how, by whom, and on what schedule to be captured; and where and how archived. The library will develop a dashboard approach in consultation with Enterprise Systems, and pilot this with some core data elements. ***Results:*** Library managers have developed a central document that lists all our assessment activities with details on methods used, frequency with which the assessment is conducted, and applications/outcomes. Assessments

	for specific aspects of library operations are conducted at least once a year by every unit of the library (access services, technical services, research & instructional services, archives and special collections, and overall library administration). Analyses are used to improve library operations and inform goal setting. In addition, assessments are conducted on an as-needed basis as part of project management. An example of this is usability testing conducted when new e-resource interfaces are developed. Library managers consulted with Enterprise Systems to learn more about dashboards, and are gathering examples of dashboards specific to libraries to inform future development of a local dashboard.
4. Shared vision for information literacy	In progress ***Description:*** Liaison librarians have successfully grown our information literacy program to reach all FY Seminars. Some major courses of study are consistent in their inclusion (and infusion) of information literacy into curricula. Other information literacy efforts are more ad hoc and sporadic. During FY11, we will promote a consistent, shared campus vision for information literacy by developing and executing a communication plan to reach all academic departments, as a supplement to individual liaison outreach to departments. ***Outcomes:*** Use existing data to identify "bright spots" as well as gaps in information literacy integration, and determine where to most effectively put our efforts. Determine current faculty perceptions/wants/needs regarding information literacy. Develop a renewed vision statement for information literacy. Develop and implement discipline-appropriate strategies for moving information literacy plans forward on the "capability maturity model" continuum. As part of this process we will develop a more consistent, intentional approach to assessment of information literacy going forward. ***Results:*** A longitudinal analysis of instruction activity was conducted to identify "bright spots" and gaps, and

	reasons for variation between departments were discussed with individual liaisons. A survey of all FY Seminars was conducted regarding information literacy instruction. Faculty feedback on curricular information literacy instruction was gathered during library managers' lunches with American Studies, Biology, Spanish, and Political Science. Additional feedback was solicited from the APSC Library Subcommittee. Overall perceptions of faculty regarding our information literacy program are quite good, but we identified some specific areas for improvement. The Information Literacy section of the library website was overhauled, several handouts summarizing information literacy were developed to present at various faculty meetings. A presentations were delivered at a faculty Department Chairs meeting as well as at FY Seminar faculty workshops. Meetings with FY Dean Shalom Staub about improving information literacy instruction throughout the FY experience are ongoing. An instructional improvement workshop for librarians was held in August with CPC partners.
5. Sustainable approach to physical collections	<u>In progress.</u> ***Description:*** The library's collection must align with Dickinson's curriculum. In order to continually improve the usefulness of the collection, the library liaisons must put in place policies that guide the acquisition of new materials, and allow for the replacement or removal of outdated or inappropriate ones. Keeping in mind that information is ever-increasing, but that each academic discipline maintains a core of knowledge, the library must engage in regular, targeted collection analysis in order to enhance the credibility of our holdings, improve the usability and discovery of relevant research material, and inform the purchase of new material. ***Outcomes:*** Collections guidelines will be developed at the rate of at least one department per liaison per year. Collection analysis reports will be produced by each liaison annually for at least one selected section of monograph

holdings. A print journal retention policy will be implemented. Items in storage will be reviewed (approximately 10% per year) to identify materials to transfer back to Waidner-Spahr stacks. A stack maintenance plan will be developed and implemented to address growing collections in a strategic manner. We will develop a process to maximize discovery of DVDs in our collection.

Results:
- Collections guidelines inform the librarian and the faculty what types of material are appropriate the library collection, based on each department's needs. In FY 2011, new collections guidelines were created, approved by the faculty, and posted for Theater & Dance, Education and INBM.
- Collections analyses are performed to determine whether or not the library's monograph collection meets the needs of the department's curriculum. In FY 2011, the following progress was made on collection analysis:
  - ➢ English: report will be discussed with department fall 2011.
  - ➢ German: analysis completed, faculty elected not to pursue.
  - ➢ Environmental Science: Completed the Earth Sciences collection analysis report in February, but held follow-up for new Sciences liaison.
  - ➢ Spanish/Latin American Studies: Completed and presented to faculty. Follow-up deferred to late fall or spring due to liaison's leave of absence.
- Stacks review: This study will help us assess the condition of books in the stacks and replace or remove missing titles from the catalog. This goal was deferred to 2012, but some sample reports have been created to test the methodology.
- Print Retention Policy: This policy would drive the retention of print journal backfiles. The library managers decided not to bring this

	before the faculty at this time. However, we have made arrangements with the science faculty to move journals in Tome and Dana back to Waidner-Spahr, or to discard outdated materials, and leave only a core set of books in Tome. Several shelving units in Tome were dismantled and the space was reconfigured following consultation with faculty. • Items in storage will be kept as is pending a decision regarding the renovation or transfer of the storage facility. • Storage review: Librarians reviewed approximately 6000 library records using SIRSI reports. Materials were selected to be relocated to the library collection. 12% of the records reviewed were reclassified and immediately made available in the stacks. This review will continue each summer. • Storage review: Archivist reviewed all titles published prior to 1850, and titles published between 1850 and 1900 in call number ranges 000 through 799. Of 692 titles, 113 (16.3%) were relocated and made available in the stacks, and 60 (8.7%) were relocated to the special collections. • DVD Collection Management: Finding aids were developed and published on our website. Users can now browse our film collection by languages other than English or by Academic Discipline. Additional notes added to individual catalog records make this possible. The creation of a policy for collecting and retaining DVDs was deferred.
6. OPAC improvements	<u>In progress.</u> **a) Implement OPAC improvement recommendations identified in 2010.** *Description:* For several years we have observed faculty and students having difficulty navigating and discovering library-owned materials through our online public catalog. To address this problem, the Next Generation OPAC group was formed to identify features and

functionality desired in our OPAC, identify which products (both commercial and open source) have many or most of these features, and identify the pros and cons and costs or benefits of adopting the product. The group completed an exhaustive literature review, performed site visits, attended online presentations and reviewed peer library catalogs. The final report concluded that although our current hosted OPAC would not be able to provide the features wanted or needed to improve navigation and discoverability, there are two products that are promising and require further investigation – WorldCat Local and Summon.

Outcome:
After pilot installation, campus feedback on Summon and Worldcat Local (if possible) will be captured. Assess feasibility. Determine technical and funding plan for implementation.

Results:
- OPAC: Installed Sirsi e-Library. This was a free upgrade from our current OPAC. Benefits included user familiarity, more attractive interface and some more advances features such as narrowing an initial set of search results by broad topic areas and suggestions for relevant subject searches.
- Discovery Tools: WorldCat Local and Summon were not able to offer a trial of their product at which point we elected to evaluate a similar product, EBSCO Discovery Service. The product compared favorably with Summon. EBSCO agreed to offer a 6- month trial of their product using our library's catalog content and databases.

b) Implement technical and staffing improvements to various interlibrary loan systems.

Description:
Technological advances are providing alternatives to traditional interlibrary loan, including more rapid and unmediated access to a broader pool of available resources. The adoption of new systems provides opportunities to reengineer the workflow and reconsider the staffing assignments.

	Outcome: Migration to the new Relais EZborrow software. Implementation of efficiencies and improvements through exploiting synergy among the three systems: EZborrow, RapidILL and ILLiad. Feasibility study for pre-populating ILLiad patron database using Dickinson authorization credentials and implement. Revised staffing plan for ILL, incorporating efficiencies of new technologies. *Results:* • EZBorrow: Successfully added NCIP to facilitate efficiencies with Relais system. Documented staff workflow and implemented into daily routine. • ILLiad – Access Services staff and student employees collaborated to submit a short video to win a $4000 grant to improve our ILLiad system. A trainer from Atlas Systems spent two days working with staff to help organize workflow, improve turnaround times, and improve communication with our users. Staff members benefitted from hands on training with the ILLiad system. Enterprise Systems staff met with ILLiad developers to determine if authenticating users against the active directory would be a viable option. Because the ILLiad server is hosted by OCLC, the active directory could not be used. Other suggestions were discussed. It was decided we would not to move forward with upfront authentication at this time.
7. Support staff training program	In progress. *Description:* In order to support continuing worklife growth for staff and meet changing library needs, managers will develop a plan for individual training and development. *Outcome:* Individualized learning goals will be developed with each staff member during the annual review period. Managers will identify and provide support for

	appropriate training opportunities. ***Results:*** Library management has worked to create a culture of support for staff development. All annual reviews include individual staff development/training goals for the coming year. Funding is provided as needed for training and professional development that aligns with goal. Specific examples of development activities in which library staff participated include: • Collections and Technical Services Staff participated in training programs on wikis, Word, Excel, Swets, OCLC cataloging products, and Serials Solutions. • Access Services staff had intensive 2 day ILLIAD "makeover" training. Access Services staff have also attended a number of professional development opportunities through Human Resource Services. • Archives and Special Collections staff participated in Technology Training Certification Program, Level 3 and Level 4, for Microsoft Office. • The librarians were trained on OCLC's WorldCat Collection Analysis. Plans for summer 2011 instructional improvement workshop were finalized. • Liaison librarians attended various professional conferences throughout the year. Maureen and Theresa participated in the campus Leadership Coaching Program.

User Services Department

1. Desktop virtualization	A comprehensive Desktop Virtualization trial was conducted and the results indicated no substantial performance or costs benefits. Desktop virtualization transfers software access and support on to a server environment which minimizes client support costs but the software costs offset those support features. In order to fully deploy Desktop Virtualization our enterprise software costs would far exceed the support cost reductions. Also, the evaluation demonstrated that not all desktop software is capable of functioning effectively within a virtual environment.
2. Microsoft Office 2010 implementation	Microsoft Office 2010 for Windows workstations and Office 2011for Apple workstations was deployed in 2011.
3. Client self service tool recommendation	In May 2011, the Track-It work order system was replaced with the Dell Kace Tool. The Dell Kace tool provides numerous features and functions some of which are client support based. We are currently in the process of testing several new features and functions of Dell Kace and fully expect to recommend some client based features.
4. Analysis of student anti-virus solution	This initiative was created based upon the lack of a comprehensive anti-virus solution for Student personal computers when attaching to the Dickinson College Residential Network. Anti-Virus technology has evolved so rapidly that Students are now arriving with more mobile devices and workstations equipped with effective Anti-Virus/Malware protection software. The need for a campus wide solution is no longer valid.