Strategic Plan for Information Technology

February 16, 2010

Lewis & Clark College Portland, Oregon

The Information Technology Strategic Advisory Council and the Information Technology Department wish to acknowledge the Lewis & Clark community engagement throughout the planning process. We are grateful for the multitude of perspectives that have helped shape the IT strategic plan. We sincerely encourage and request continued community engagement throughout the implementation of the plan.

Introduction

Why Information Technology Strategic Planning?

Lewis & Clark has undertaken an IT strategic planning process in order to anticipate the technologies (applications, services, support, and infrastructure) required to meet the future needs of the institution. It has become ever more difficult, however, to predict the kinds of technologies that will become available in the rapidly advancing arena of technology development. This means that the motivation for IT strategic planning at Lewis & Clark is broader than simply trying to identify the technologies that may be needed. Rather, it is necessary to align the use and acquisition of new technologies with the institution's priorities, increase community knowledge about technology needs and constraints, build alliances and partnerships across the institution, prioritize and identify funding for IT projects, and optimize current resources. In addition, we must do all this while keeping an eye on future developments in IT and higher education and adjusting the plan as necessary.

How did we get here?

In May 2007, the Executive Council approved the formation of the Information Technology Strategic Advisory Council (ITSAC) with the charge to provide advice and guidance to the Chief Technology Officer and Executive Council on technology related IT planning, policy, and new initiatives. The membership of the Council currently includes:

Chief Technology Officer (Dan Terrio, Chair)

Provost (Jane Atkinson)

Associate Vice President for Development (Catherine Crooker)

Dean of the College of Arts and Sciences (Julio de Paula)

Associate Dean for Academic Affairs, Law School (Martha Spence)

Dean of the Graduate School of Education and Counseling (Scott Fletcher)

Director of the Watzek Library (Jim Kopp)

Associate Dean, Boley Library (Peter Nycum)

Vice President for Business & Finance (Carl Vance)

College of Arts & Sciences Student Representative

Law School Student Representative

Graduate School of Education & Counseling Student Representative

During the 2007-2008 academic year, the Information Technology Strategic Advisory Council formulated an institutional vision statement for Information Technology. In June 2008, ITSAC held a day-long workshop focused on IT strategic planning that laid the foundation for the current IT strategic planning process.

In September of 2008, ITSAC requested support from the Strategic Initiative Fund to hire a consultant to conduct an external assessment of the IT environment at Lewis & Clark and to facilitate an IT strategic planning process. Funding was approved in October 2008 and shortly thereafter Eduserve International, a consulting firm that works solely with higher education institutions, was engaged.

Representatives from Eduserve visited the college and met with nearly 100 community members from key constituent groups during the first week of December 2008. With the information collected during

that visit, an environmental scan, and data from a survey of Lewis & Clark faculty, staff and students, the consultants produced an assessment report outlining observations, analysis, and recommendations. This report was delivered to ITSAC and finalized in March 2009.

In preparation for broader community planning fora in the winter/spring of 2009, ITSAC reviewed the April 2006 report from the Planning Task Force, the 2009 Horizon Report from the New Media Consortium and EDUCAUSE, and its own conversations identifying drivers for IT strategic planning at Lewis & Clark. From that review, the council identified four major planning themes: Sustainability; Internationalization/Globalization; Teaching, Research and Creativity; and Community and Collaboration. During the last week of February 2009, the consultants visited Lewis and Clark again to facilitate the open planning fora with faculty, staff and students. ITSAC and the consultants analyzed the information gathered from those fora and clustered the data into six major IT strategic goals.

Strategic goal #1: Enhance Teaching and Learning

Strategic goal #2: Strengthen the Lewis & Clark Community

Strategic goal #3: Create and Sustain an Interactive Data/Information Management Strategy

Strategic goal #4: Envision and Build a New IT Infrastructure

Strategic goal #5: Develop IT Support, Understanding, Collaboration and Communication

Strategic goal #6: Establish an Institutional IT Governance Structure

During the spring/summer of 2009, council members organized and facilitated six strategic planning working groups that consisted of faculty, staff and students. Each working group focused on one of the six IT strategic goals to identify objectives in support of achieving the goal. In the following pages, each strategic goal is introduced, providing a broader definition of the goal and some context of current conditions, followed by the objectives identified by each of the working groups.

Strategic goal #1: Enhance Teaching and Learning

Lewis & Clark is an institution focused on teaching and learning and informed by collaborative scholarship. Lewis& Clark should seek creative and innovative ways to further integrate technology into teaching and learning.

Technology should support and advance our teaching and learning by enhancing, not replacing, face-to-face learning. We observed that technology literacy should not be about teaching specific skills to students, but modeling the use of technologies to support learning and equipping our students for life after Lewis & Clark. The use of technology in teaching and learning is uneven across the institution. We desire to understand not only what technologies are available (or could be available), but also to learn how individuals across the institution are integrating technology into teaching and learning. We also desire to develop mechanisms for faculty to share with their colleagues, learn from each other, identify disciplinary differences or similarities, and vet the appropriateness of technologies in teaching and learning. There are concerns that the reward structure for faculty does not promote experimentation with technology in teaching. How can Lewis & Clark appropriately evaluate and recognize digital contributions and effective teaching? Participants suggested that technology could be used to share our teaching and scholarship more broadly, beyond the boundaries of Lewis & Clark. In addition technology can provide ways to expand cultural awareness and connect with the world around us in our teaching, learning and scholarship.

<u>Context of Current Conditions:</u> Every part of the curriculum at Lewis & Clark relies implicitly on information technology. Knowledge today is largely created, stored, and communicated with the assistance of technology. The various academic disciplines use specialized technologies. Fields of study such as physical chemistry have seen immense advances with computer technologies. Computer-based tools and resources have transformed other fields like geology. Basic academic activities such as classroom instruction and provision of library-delivered information now rely on technology. For these IT has become indispensable.

At Lewis & Clark there is considerable variability in the extent of the use of technology in teaching, learning and research. To a great extent, usage depends on the initiative of faculty acting as individuals. Some faculty have developed skills and pedagogical innovations unknown to their colleagues. The range of awareness and interest for technology varies widely among faculty. Faculty report difficulty in finding the time to take advantage of what training is available.

Objectives:

1. Foster a culture of sharing and inquiry that raises awareness of best practices for integrating technology in teaching, learning, research, and outreach.

The institution should strive to build systematic structures that support communication and collaboration that include face-to-face meetings promoting creative and strategic thinking and planning for the appropriate integration of technology into teaching, learning, research and other creative activities. Identify and target key opportunities for faculty (IT) development and support in relation to specific instructional goals, where the focus is on pedagogy with technology supporting pedagogical and learning goals. The institution should address challenges such as time

and reward structures in IT planning and integration (see objective 2). The institution should build mechanisms to connect faculty and staff across the traditional institutional boundaries.

2. Evaluate current faculty incentives and rewards for integrating technology in teaching, learning, research, and outreach activities.

As part of the overall commitment to rewarding pedagogical innovation, Lewis & Clark should encourage and reward risk-taking in adopting, experimenting and integrating new technologies in teaching and learning. The institution should offer tangible support for innovative use of instructional technologies such as course release and resources for team teaching. Partnerships across traditional institutional boundaries that bring together faculty, IT staff and Library staff should be encouraged and supported. Faculty annual reports could include questions about technology integration. The institution should create forms of public recognition (e.g. awards) for technology that emphasize those partnerships, innovation and risk-taking.

3. Create and sustain a leadership structure that promotes the identification, evaluation, and implementation of IT resources for teaching, learning, research, and outreach.

The institution should assess existing structures and collaborations to modify or create and then sustain a governance structure that encourages faculty and staff to engage in the responsibility for IT planning and feedback at all levels. Develop clear, regular and structured ways of communicating about IT applications, including needs assessments, evaluation of current applications and creative reflection on future possibilities. The institution should seek distinction among peers in the use of information technologies to promote the institutional mission and enhance and advance teaching, learning, research and other creative activities.

4. Integrate IT learning into faculty professional development policies and practices.

The institution should examine the current professional/faculty development policies and practices with an eye to finding opportunities to provide more sustained and integrated IT support to faculty in their professional development. Initiate a dialogue among faculty about baseline technology skills for faculty and students at the program level, scaling up to the institutional level as appropriate. The institution should identify and support new sources of funding for ongoing professional/faculty development for technology integration while also considering the future use of or need for facilities/space for faculty and staff working with or exploring IT projects.

5. Develop a digital repository and strategy to preserve and disseminate collections of digitized materials.

Because of the rapid evolution of technology, the institution should survey the current formats in use for storage and preservation of information, data, collections and work; and develop an institutional approach to collect, preserve and store digital materials for efficient dissemination and long-term preservation. The institution should develop written policies about what materials/information should be made available, to whom and with what safeguards, consistent with existing laws and best practices.

6. Encourage collaboration with other institutions, particularly in the city and region, to share information, resources, and technology strategies.

The institution should survey the faculty and staff to identify existing collaborations. From that information, the institution could identify and consider additional and new collaborations and partnerships that would provide opportunities for mutual growth, including "virtual", technology mediated collaborations. The institution should also encourage outreach to community organizations (e.g. public schools, community groups) by faculty, students and staff.

7. Create a virtual organization to advance academic technology, involving staff, faculty, and students interested in instructional technology and faculty development.

The institution should support the organic growth of a support structure by examining the existing structures and other potential structures such as user groups around particular applications. The institution should identify and support (e.g. tangible rewards) more experienced users of technologies to work with and support colleagues. IT and Library staff should be integrated into faculty/staff work groups as partners in faculty, pedagogical and curriculum development, promoting collaboration.

- Administrative structures are in place and include faculty and staff from all areas of the institution.
 - Agendas/minutes from meetings reflect input from multiple constituencies.
 - o Collaborative projects with IT staff increase in number.
 - o Proposals for internal and external funding for IT projects increase in number.
 - o Number of collaborative projects increases.
 - o Faculty and staff increase their use of IT resources.
 - o Informal consulting amongst colleagues is increased.
- Faculty and staff regularly attend IT-related events.
- Faculty and program annual reports reflect increased experimentation and activity in IT integration.
- Reward structures are in place
 - o Deans, directors and managers offer explicit encouragement for IT integration.
 - New incentives are created (e.g. faculty/staff awards, course release for development, etc.)
 - Existing professional development funds are made available for sustained development in IT integration.
 - New sources of funding for professional development in IT integration are sought.
- The institution is recognized for effective and innovative use of IT resources.
- Connections with other institutions and professional groups increase in number.
- Sustained collaborative projects increase in number.

Strategic goal #2: Strengthen the Lewis & Clark Community

Lewis & Clark should explore opportunities where technologies might be used to strengthen our sense of community.

The community experiences difficulties and challenges in trying to find information about campus events, people, places, services, etc. Users want to have tools available for finding easily the information that each individual wants and needs, filtering out the rest, dynamically updating information as it changes, and making it readily available. Users also want access to the same services and information when off-campus as one has on-campus. We heard many thoughts about how technologies (such as BLOGs, WIKIs, Facebook, and Twitter) might be used to enhance community at LC, as well as the sentiment that common standards (using the same software/versions) might also enhance community. It was noted that our community is diverse and that the needs of disabled community members need to be considered in our plans for technology.

<u>Context of Current Conditions:</u> The Planning Task Force, in its 2006 report, identified six strategic goals, on of which was to "Enhance the Lewis & Clark College community". Additionally, the Planning Task Force report made specific recommendations supporting this strategic goal that provide a framework for the objectives for the Information Technology Strategic Goal for strengthening the Lewis & Clark community. Taken from the 2006 Planning Task Force Report, pages 13-14 and 26, they are:

Recommendation 4: We recommend fostering opportunities for communication, cooperation, and collaboration among the three schools of Lewis & Clark College.

Recommendation 5: We recommend the development of initiatives to enhance the sense of common purposes and community among staff and faculty.

Recommendation 6: We recommend that measures be taken to improve students' sense of belonging to the Lewis & Clark College community.

Recommendation 26: We recommend the development and implementation of consistent and effective methods of institutional communication.

Objectives:

1. Develop training and communication strategies for existing and new technologies.

The institution should encourage and support the organic growth of users groups and "brownbag" type of opportunities to learn about existing technologies. The institution should provide more self-help mechanisms. Training should be a priority of any implementation for any new systems and technologies as well as "marketing" plans to get the word out to appropriate users about new systems and technologies so they do not languish unused.

2. Remove technological barriers to face-to-face community building while being creative in how technology is used to augment those face-to-face experiences.

While the advent of "social networking" technologies has made virtual connections easy, special attention should be given to providing opportunities for face-to-face community building. These experiences can explore technologies to maintain and augment relationships established through those face-to-face experiences.

3. Create a structure and communicate it well where someone experiencing frustration with technology can speak directly to a support person for assistance.

It was deemed important to maintain and enhance the ability for people to speak to a person when in need of assistance. Self-help cannot be the answer to all problems that community members encounter.

4. Build a culture of collaboration among teams during planning and implementation of new systems/technologies, being inclusive and transparent to build connections, community and buy-in.

The planning and implementation of new systems and technologies should be inclusive and transparent, involving all affected constituents. Such projects can naturally build connections, community and "buy-in".

5. Develop a strategy for taking advantage of existing networking technologies to build organic communities.

Many technologies are already in place and being used in a number of ways (i.e. The LiveWhale News Engine, Facebook, LinkedIn, Moodle, MyLC). The institution should develop strategies to continue the growth and use of these technologies to enhance and support the sense of community.

6. Understand the needs of community members to feel connected, a part of the community, and support the organic growth of smaller, focused communities (be active facilitators).

As the Planning Task Force stated, "A sense of community is intangible; we cannot create it simply by instituting new programs or offices. It grows organically from being engaged in a common purpose and from feeling a sense of shared accomplishment"; the institution should be active facilitators, supporting the organic growth of focused communities where there is a sense of shared desires and accomplishments.

7. Actively communicate what technologies are available

The institution should conduct an inventory of what people should or needs to know and build an IT service catalog, a repository of available technologies and support and find ways to broadly communicate what is available as well as assessing that the word is getting out.

8. Explore innovations in technology that promote community, striking a balance between "push" and "pull" technologies.

As technologies continue to change and advance, it will be imperative to keep an eye on the horizon to gain an understanding of how the advances might impact the community (i.e. the personal web, semantic-aware applications, geo-aware devices, etc.)

9. Utilize distance-bridging technologies to broaden options for participation in institutional activities locally, regionally, nationally and internationally (e.g. expand use of video conferencing and web casting).

The institution should develop a strategy that expands the options for participation in institutional activities through the use of video conferencing and web-casting technologies.

10. Enable community members to stay in touch through the recording and archiving of institutional events for view on demand.

The institution should strategically grow a "library" of institutional events for view on demand. The availability of such a library needs to be widely communicated.

- The creation and sustainability of users' groups is clearly evident.
- Training programs are reviewed annually and include attendee feedback
- Projects are reviewed and debriefed
- Customer satisfaction surveys are conducted and report:
 - Satisfaction in reaching a person
 - o Ability to find what technologies/services are available
- Use of video conferencing and web conferencing technologies is increased.
- The library of events for view on demand shows a measurable increase.

Strategic goal #3: Create and Sustain an Interactive Data/Information Management Strategy

Lewis & Clark should develop an effective information environment that assures the collection, input maintenance, and security of and access to information in support of institutional, school, department/office, and individual decision-making and measuring outcomes.

The college maintains many information sources. What would be the ideal information environment to promote the fullest availability of information to support institutional, school, department/office, and individual decision-making and measuring outcomes?

Students, staff, and faculty need information from various sources in order to do their work, measure outcomes and to make well-informed decisions in their roles at the college. What information do we need to collect, who is responsible for collecting that information, where is that information stored and who needs to have access? How can we make it easier to find and use information? Relationships among information systems need to be planned and the integrations tightened for those instances where information needs to be shared.

<u>Context of Current Conditions:</u> Every institution builds an information environment unique to itself and, historically, few have had the opportunity to plan it in advance. Information architecture tends to be a work constantly in progress, evolving as the institution refines its understanding of its needs. Lewis & Clark faces particular challenges in the unification and coordination of information because of its organization into three schools, which leads to multiple administrative processes, information repositories, and data-handling practices.

Lewis & Clark employs numerous electronic and manual means for storing information. These range from Colleague (student, financial, and human resources data) to specialized products like RaisersEdge (for Institutional Advancement), as well as spreadsheets and databases kept in various offices. While most critical institutional data and information is stored in Colleague which is used by all three schools for student, financial, financial aid, employee, payroll and benefits information some data handling remains organized at the office or department level. Often times that departmental or office information stays local to those discrete operations of the institution, where inter-departmental flows of electronic information being might be warranted.

Objectives:

1. Develop an unified institutional information and data management architecture

Document the current information/data architecture showing the relationships among the various applications, information systems and databases. Identify duplicate information/data sources and determine the primary repository for institutional information/data. Create a process to facilitate ongoing evaluation, change, and/or expansion of the information and data management architecture that maintains key relationships among information and data sources, provides access, and maintains security and privacy of confidential information/data. Develop a flexible information and data management architecture that allows the institution to take advantage of

technological advances and address new institutional information/data needs (i.e. outsourcing, cloud-sourcing, high speed network access such as Internet2).

2. Facilitate the development of information/data collection and retention strategies (across functional areas).

Create procedures that facilitate stewardship and responsibility for the preservation and maintenance of institutional information/data. Develop information/data classification definitions (i.e. public, internal use, confidential, academic/curricular, research, etc.). Develop policies and standards for information/data input, maintenance, retention and destruction. Identify where there are gaps in institutional data (collection). Develop a process to continually monitor and identify what information and data are required by regulatory agencies. Emphasize the measurement of outcomes.

3. Develop an overall security plan that protects institutional information/data.

Develop policies to clearly define stewardship (ownership) and access to institutional information/data. Develop policies that clearly identify where sensitive and confidential information/data can be stored. Establish a culture whereby there is accountability to the information/data standards and rights management/copyright, privacy and security policies. Provide ongoing training about institutional data standards and data/information management policies.

4. Identify and develop a strategy/mechanism for easier (and better) access to data for administrators, staff, and faculty.

Investigate and implement a solution that brings disparate data sources together into a central repository to facilitate reporting and analysis (i.e datawarehouse or datamarts). Identify and implement reporting tools that encourage self-reliance to generate and maintain reports. Increase web capabilities for access to information/data.

5. Formulate an ongoing professional development and training plan for administrators, staff and faculty with respect to the information/data management strategy that increases knowledge of policies and procedures, information/data standards, and available reporting tools.

Departments should maintain professional development and training budgets to support departmental training needs, particularly addressing staff turnover. Educate budget managers on the need for including funds for training in budgets and assist in determining what are reasonable amounts to budget.

6. Continually assess and evaluate the utilization of Colleague and associated business processes to take fullest advantage of the system's capabilities for administrative efficiency.

Regular usage audits and departmental reviews should be scheduled to evaluate the use of current systems, business process efficiency and new functionality.

7. Establish working groups/task forces to refine the objectives further into projects.

Coordinating with the established IT governance structures, working groups or project teams should be established to address the objectives outlined and develop projects, project plans, cost estimates and timelines. Such working groups and project teams should include all affected parties.

8. Conduct an annual review of the objectives and goal assessing progress and modifying as necessary.

- A map has been developed depicting the architecture and relationships
- An administrative structure is in place to address duplicate data sources and recommend primary repository for data.
- An administrative structure is in place where projects are developed, vetted and approved.
- Data definitions are published.
- Data/information management, access and security policies are published.
- Online educational resource for information security has been developed.
- Faculty, administrators, staff and students are able to obtain the information they need.
 - o Measurement of outcomes for such things as accreditation is easily accomplished.
 - o Institutional information is accurate, comprehensive and up to date.
- ROI from usage audits is documented.

Strategic goal #4: Envision and Build a New IT Infrastructure

Lewis & Clark should strive to create an infrastructure that is robust enough to provide for the academic and administrative needs of the institution, adaptable to changing needs, and subject to continual improvements to reduce its environmental impact.

The institution's IT infrastructure will need to be ever more adaptable, capacious, and innovative in order to keep pace with the technologies used by students, faculty and staff. The college must find ways to consume less electrical power and spend less on cooling and other climate accommodations for its electronic equipment. The college will need to develop new capabilities to preserve important information in digital format.

Network capacity, network-delivered services, and services based off-campus will be important planning topics. Wireless and mobile technologies are the largest area of IT growth with implications for infrastructure. Increasingly, the development of technologies in the consumer marketplace is putting pressure on the assumptions that underpin the current network infrastructure

The need to re-think infrastructure includes the challenges of energy consumption, wasted paper and travel. However the challenges of being "green" are real in that there may be contradictions that need to be evaluated. For example, if the desire to use less paper means moving more processes online, is there an increase in our energy consumption that offsets any decline in printing and use of less paper? The question of how technology might be used to reduce our environmental impact is an interesting challenge because of a multitude of variables and cultural changes that must be considered.

The overall technology environment has become highly intertwined in all that we do so that its sustainability has become critical. While hardware costs used to be prohibitive, now the personnel costs have increased in order to manage the environment and adapt to the rapidly changing technology environment. How do we make sure that we are sustaining what has become and is important to the Lewis & Clark?

Context of the Current Conditions: It used to be standard at liberal arts institutions to take a "wait and see" approach, which made sense when technology was invariable expensive and still rather slow to evolve. But today the pace of technology onset and evolution has changed importantly. The revolution in consumer electronics has shifted influence from institutional IT departments to individual members of the college community. Laptop computers, cell phones, digital camera and music players have come into use without the planning or endorsement of the College. The services and resources of the Internet have also overshadowed institutional planning: Google, Amazon, FaceBook, and the like now shape expectations for information systems, and set very challenging standards that educational institutions are unlikely to meet with their own services and resources.

Objectives:

1. Examine current infrastructure and be clear about what WILL be done and what WILL NOT be done.

Thinking strategically is not only thinking about the possibilities, but also about the things that could not or should not be done, thus allowing for the reallocation of resources to go to newly identified possibilities. Through established IT governance structures, the institution should have broad conversations with a variety of constituencies about what technology services are mission critical and what technology services are not and for that reason either should be discontinued or outsourced.

2. Appropriately maximize the use of emerging technologies that support and enhance the learning/scholarship community and connections.

The institution should not adopt technologies simply for technology's sake, but rather when the technologies support and enhance the teaching, learning, research and other creative activities.

3. Establish a process for continual review and enhancement of "connectivity" that supports convenient access.

With the institution's varied audiences, connectivity and access means different things to different people, but one common need is the ability to have access to what is needed, when it is needed, wherever it is needed. Plans should be established that support telecommuting and business continuity.

4. Establish and support a culture of "innovation" or "risk-taking" that celebrates success and failure with experimentation and adoption/implementation of new/emerging technologies.

Identify a reward structure (for faculty, staff and students) that supports innovation and risk taking. Evaluate the IT organizational structure and staffing levels to enable a structure that supports innovation.

5. Develop and support a culture of change and continued openness to new and emerging technologies that support experimentation and self reliance.

Develop and support a process for harvesting and sharing best practices that can enhance overall implementation success across the institution. Identify mechanism(s) that support the "activation energy" necessary to draw the community "up" towards more self-sufficiency. Promote the distribution of support, but provide "a place" where community members can go for help and facilitate connections. Identify and implement "smart" technologies to enable more functionality with less expert intervention.

6. Identify appropriate and innovative connections and integration between applications, systems or data/information.

As technologies continue to be developed and advanced, connections and integrations between applications, systems and data/information become ever more critical. For example, the advent of mobile technologies that can make phone calls, read and reply to email, maintain calendars,

explore the web, etc. have brought about the need to connect to various other applications, systems or data to maintain the fullest functionality of these new devices.

7. Educate the community about the ethical responsibilities of being a responsible network citizen.

As everything moves to the network (Intranet or Internet), the institution should proactively educate the community about each individual's responsibilities as a member of the network(s).

8. Keep a watchful eye to the horizon for opportunities for cloud-sourcing applications/services.

The institution should watch the developments in cloud computing, keeping in mind what information/data or services need to be housed locally versus what might be able to be moved to the "cloud", understanding the full costs, benefits and risks.

- Technology is viewed as an enabler and catalyst for change.
 - o Expressed excitement versus hesitancy toward implementation of new technologies.
- Copyright infringement notices for P2P file sharing continue to drop.
- The technology infrastructure is flexible and adaptable to connect new emerging devices.
- Helpdesk data (i.e. types of calls/questions, number of calls, etc.) are tracked and reviewed on a regular basis.

Strategic goal #5: Develop IT Support, Understanding, Collaboration and Communication

Lewis & Clark should strive to build a wider community of support that allows the institution to be more agile and proactive in the implementation of new and innovative technologies.

Information technology is diversifying and expanding at rates that outstrip the ability of any campus IT support organization to match its growth. Inevitably, more people and more sources of information will be needed to provide the support the campus community needs. Those with knowledge and skills useful to their peers will need to be enabled to contribute to this support effort. Improved self-help and training capabilities will need to be developed. Shared "knowledge bases" will need to become the source of answers to many support needs that now get directed to the professional IT staff—and that distract them from the work for which their help is more importantly needed: the resolution of problems not already resolved. A key term that repeatedly was mentioned was *communication* and perhaps this needs to be woven into the Goal statement or its definition.

<u>Context of Current Conditions:</u> The message from the community forums highlighted several issues: The community doesn't know what IT resources and services are available or possible; The community doesn't always know how others might be using technology in their jobs; the community has had an "oral tradition" for training on some of the major applications; the community can be overwhelmed by the possibilities and how to determine what is needed; and there should be opportunities for us all to learn from each other.

A way to let the community know what is available or possible needs to be developed. The successes of creative and innovative colleagues need to be highlighted, shared and celebrated. It must be determined when and if it is appropriate for IT to be the center of "expertise". In addition, members of the institution need to work together, talk to each other, and support each other in the use of technology, in keeping with the values of Lewis & Clark.

Objectives:

1. Formulate a model of community-based IT knowledge and support, breaking down the provider/user paradigm.

The institution should develop an assessment mechanism to determine the current technology literacy of faculty, staff and students, identifying foci of expertise/specialization and a common threshold of technology awareness. The organic growth of users' groups or "clusters of expertise" should be encouraged and supported. A training program that supports a community-based model of support such as train the trainer should be developed. Support opportunities that may be beyond the institutional "walls" should be indentified and publicized.

2. Establish a public knowledge-base for technology support, understanding and collaboration to promote self-help.

The institution should explore the utilization of Web 2.0 technologies (e.g. WIKIs and Blogs) that support community sharing of technology expertise, creating an "IT support portal" like "MyIT". Enhance and expand the IT tip sheets to include links to outside expertise as well as further internal development.

3. Identify the appropriate use of financial and human resources for institutional IT support and services.

The institution should conduct an inventory of systems and services as well as gather an understanding of their utilization. Opportunities for outsourcing/cloud-sourcing applications and services that would enhance service levels and reduce costs should be identified and compared to the service level and costs of current operations. Job descriptions and compensation should be reevaluated in support of a community-based model of support. Appropriate standards that can reduce costs and streamline support should be identified. Contractors for "short" term development projects should be considered and utilized as necessary to free up IT staff for ongoing support.

4. Expand IT outreach.

The institution should create structures that proactively inform IT about departmental, divisional and school goals and objectives to better align support and services to meet or even exceed expectations.

5. Strengthen the Lewis & Clark orientation for new staff, faculty and students.

Identify opportunities to enhance orientation for new staff, faculty and students that clearly articulate available services and support and that proactively manage expectations. Support the continued professional development of existing faculty, staff and students, identifying development/training needs of the various audiences.

6. Conduct surveys or solicit feedback about training and support to continually adjust and improve the IT support, understanding, collaboration and communication.

- There is a knowledge base developed that includes:
 - o Contribution from members of all areas of the institution, not only IT staff
 - Usage statistics
- There is an increase in the number of users' groups
- Helpdesk statistics are tracked and reviewed on a regular basis, including the number of calls, type of calls, call resolution rates, etc.
- There is an increased commitment to funding professional development.
- The IT staff are involved in more meetings outside of IT.
- The use of contractors for short term development is utilized.

Strategic goal# 6: Establish an Institutional IT Governance Structure

Lewis & Clark should strive to increase communication, conversation and shared IT governance across the institution, thereby making IT everyone's business.

Information technology is not solely the business of the Information Technology professionals. Because IT is so ubiquitously important at Lewis & Clark, all constituencies need to participate in IT governance. The IT strategic planning initiative of 2008-2009 needs to be sustained and folded into annual planning and budgeting processes. Departments and offices need to set their own plans for IT development and in so doing, participate in the wider discussion of how IT needs to develop at the college.

Transforming IT governance at Lewis & Clark will call for the establishment of new standing committees, new channels of communication, and new forums for discussing IT matters.

<u>Context of Current Conditions:</u> Lewis & Clark does not have a formal IT governance structure or a clearly defined and articulated structure for IT decision-making. While the institution has established the Information Strategic Advisory Council, there are varying degrees of familiarity with the group, its charge and its membership. There is a perceived disconnect where the "right hand doesn't always know what the left hand is doing" in regards to technology. All of this creates the potential for misunderstanding, anger, apathy, and redundancy in effort and expense. There are multiple competing priorities at the institution and a lack of understanding about those competing priorities and how they might be resolved. Any formal structure should be adaptable and nimble, proactive, and inclusive.

In the academic realm, while there are a number of technologies to be used in teaching and learning, the focus is on the tools and not the usability and the effectiveness of the tools to advance teaching and learning.

A similar problem is found in administrative areas where technology is sometimes adopted without adequate follow-through to insure proper implementation, ongoing training, and rethinking of business processes to make optimal use of new systems. More attention needs to be paid to the organizational ramifications of adopting particular technologies if they are to be sustainable and justifiable investments for the institution.

Communication, data management, and education are at the heart of these issues.

Objectives:

1. Retain and develop ITSAC as the institutional council for IT governance.

The institution should review the ITSAC membership to ensure that it is appropriately constituted and inclusive. The council should develop an effective communication plan so that the institution's constituents are informed about the work of ITSAC. The institution should define the connections between ITSAC and other relevant/existing structures, committees, and clusters within the individual schools and across the institution. In addition, a model should be developed and articulated for institutional IT decision-making, modifying the charge of ITSAC to include a section on how technology decisions are made, where information is gathered and analyzed, who

sets priorities and who settles disputes. It may be that ITSAC is charged with ultimate authority, but can delegate authority to other committees/councils/clusters as appropriate. ITSAC and its outreach efforts should be used to model a culture of inclusiveness and information sharing for the institution.

2. Work to define an institution-wide structure of appropriate committees/councils/clusters (some already existing bodies; others, to be created) that is nimble, adaptable and not onerously bureaucratic.

The possibility for creating school-based advisory and/or coordinating councils that connect to ITSAC should be explored. The well established and effectively functioning "cluster" model of the Registrars, Student and Departmental Account Services and Student Financial Services could be utilized to pilot one or more additional clusters that bring together representatives from offices or departments. These clusters should be linked in some interdependent way through technology-mediated processes, and ensure that the existence, articulation, responsibilities, and work of these entities are effectively communicated to ITSAC and the institution.

3. Establish an institutional culture to support IT strategic planning.

After the completing of the IT strategic planning process, ITSAC should lead the effort to develop and implement an annual strategic planning process for updating and refreshing the IT strategic plan on an ongoing basis. The institution should develop feedback mechanisms to ensure that the perspectives of all Lewis & Clark constituents are included in this work. ITSAC should also develop assessment mechanisms that evaluate the implementation and ongoing planning activities. The institution should proactively monitor the changing technology landscape, continually informing the ongoing planning process and communicating opportunities to the community.

4. Enable IT to establish proactive outreach, education, and partnerships across the campus.

The institution should develop ways to include IT representatives in planning discussions within schools, divisions, departments, offices and committees across the institution so that they can proactively identify ways that technology can support and enhance programs and initiatives. Departments should be encouraged, in partnership with IT, to develop "local" technology plans that align with departmental and college-wide goals, priorities and needs. Such plans should address technologies, staffing, professional development and business continuity. Educational opportunities for faculty and staff should be expanded so that they can be knowledgeable and effective participants in IT governance and planning. Effective ways to tap the knowledge, imagination, and insights of our talented students by including them in IT governance at every level should be established

- ITSAC communication plan is developed
 - o Community reports feeling informed
- IT decisions are made inclusively
- There is increased participation of faculty, staff and students in IT advisory roles
 - Agendas and minutes from such groups reflect input from multiple constituencies
- Annual report reflecting the progress towards achievement of goals and objectives are completed and adjustments to the IT strategic plan are made on an ongoing basis.

•	The IT governance structure is documented showing responsibilities and relationships between councils, committees, and clusters.