Minnesota
STATE COLLEGES
& UNIVERSITIES

Instructional Management System Advisory Council
MEETING NOTES
September 17, 2007
10:30 A.M. – 1:30 P.M.
World Trade Room, Wells Fargo Place, St. Paul

NEXT MEETING: **Date:** October 8, 2007
Time: 10:30 A.M. – 1:30 P.M.
Location: World Trade Room, Wells Fargo Place, St. Paul

ATTENDEES: Lesley Blicker, David Bouchard, Mike Condon, Paul Cusick, Penny Dickhudt, Todd Digby, Alfred Essa, John Falkofske, Zala Frashant, Carol Lacey, Karen LaPlant, Gary McKinley, Chuck Morris, Kim Priener, John Rohleder, Anne Marie Ryan-Guest, Nima Salehi, Alicia Serrioz and Karen Wenz
ITV: Sally Johnstone and Rhonda Ficek

1. Announcements

- Future Meeting dates have been set as: 10/8/07, 11/5/07, 12/03/07 and 01/18/08. Agenda Items may be sent to the Executive Committee.
- For our October meeting, Lesley Blicker will be presenting a report on St. Cloud State's eCollege pilot.
- We will soon start looking at other alternatives to D2L. We also want to look at Moodle in more depth. We would like to discuss non-D2L implementations at the November meeting.

Crisis Committee:
The Crisis Committee is mainly comprised of this Council's Executive Committee as well as the D2L Administrators and Trainers. Procedurally, we need to:
1. Have a communication mechanism in the event of a crisis and
2. Agree on what kinds of events the Crisis Committee should be involved in.

During the events over the past couple of weeks, what we were trying to do was communicate to the D2L Trainers, Administrators and CIOs but many of them did not know what was going on, particularly faculty, staff, CAOs and Presidents.
In what situations should the crisis committee get involved?
- Generally, campuses staff and faculty like information to come through their local on-line group. We ended up spending a lot of time correcting miscommunications. It is very difficult to manage a crisis when the people who are affected are not being properly informed. We need a more reliable method to communicate to faculty.

Students also need to be made aware of crises. Faculties want to be the main source of information to their students. Maybe we should put together messages that campus administrators can send out to their campus staff and faculty. And then faculty can send the information out to their students.

Action Items:

- Create a general document, a standard operating procedure to follow in the event of a crisis, and post it on the D2L website. We have a Code Blue protocol document that is currently in revision. When it is complete, it will be submitted to the IMS Advisory Council for review.

- We also need a method of communicating system failure issues to students. Faculty members will not, however, be filters of communication to students.
- Update the Crisis Committee with members' cell phone numbers.
- James Falkofske suggested that when sending out email notification, recipient information should be included in the body of crisis notification emails so people will know who is being made aware of the situation.

IMS on D2L:

Chuck Morris and Karen Wenz have set up an IMS Advisory Council course on D2L. Council members should send suggestions of what sorts of things to be placed on the course to the Executive Committee. We will use the course as a communication mechanism. We could possibly set up areas on the D2L course for the sub-committees to work within.

Action Item:

Karen Wenz will send out instructions on how to gain access to the D2L Course.

2. **Update: System Status, Performance Issues, Risk Issues, Tools Status etc** – Al Essa

At a recent State Meet and Confer meeting for IFO, there was a discussion about communication of performance. What is our uptime? What is our downtime? What is the necessary level of performance? We need to make sure people know about these things, but first we need to nail down some facts. The end result needs to be a service level agreement that defines expectations to the customers. It is a contract between two parties where we offer services under certain conditions.

Performance Issues - There were four outages over the span of three weeks.

- Outage #1 was D2L-related. There was a hardware failure on our storage area network (SAN). The SAN is the system where D2L data is housed. We have an IBM SAN behind the D2L server which has redundancy on many different levels. The primary controller is what connects the server to the storage unit. The primary controller failed, but we had a secondary controller to failover to. The software was not able to switch over. IBM came in and replaced the primary controller, but they still have not figured out why the software was unable to failover. If a failover works in test mode, there is still no guarantee that it will work in the event of an actual crisis. In this case we have no level of assurance that this will not happen again.
- Outage #2: A power failure took place at the West Bank Office Building (WBOB) at the U of M. This is where our primary data center is housed. The back-up generators came online but the temperature in the server room started to rise 1 degree/minute. The U sent out instructions to shut everything down. The chillers in the data center both blew fuses and failed. During the outage, we kept D2L down. All the other servers were shut down.
- Outage #3: A couple of campuses with ISRS and web registration were affected. A couple of weeks later, Mankato's data center went out and their redundancy did not kick in.
- Outage #4: D2L: The server had a hard crash that was traced back to two bugs. One was on the application side and the second one was an MS SQL Server bug. Patches were applied within 24 hours. A week later there was another crash that we traced back to a second SQL server bug. Our technical staff has prepared a

work-around, but there is still no resolution. Microsoft has been working with us to create a patch.

No matter how much money we spend on IT, systems will still fail. We cannot provide 100% reliability. Customers have to understand this. We need to figure out our level of reliability. We can understand and tolerate system downtime, but there are certain crucial periods when we must have reliability, particularly at the beginning of the school year which is when most problems seem to occur.

Is D2L reliable as an application? - Al Essa

There is no application out there that is more scalable or reliable than D2L. We would face similar performance issues with any application. The root cause of our crashes was not load. The probability of a crash increases with load, but in these cases, the causes were not load-related. When there is a new system release, there are going to be bugs if the testing period is not sufficient. The other aspect is that two of the three bugs we had were related to SQL server. We are pushing beyond the level of what this application can sustain. We do not want to engineer a solution that takes care of the load issue, but does not take care of the problems that caused a particular failure.

1. Be clear, we should be looking at performance and load. We are breaking all sorts of records and are on an upward slope. This has to be in the context of other trade-offs.
2. On the innovation point: this is innovation within the context of staying with D2L. Should we be looking at other sorts of applications, such as Moodle?

Action Item:
Starting next month Al Essa will bring metrics on D2L performance to IMS AC meetings.

What kinds of performance expectations are there?

1. General performance expectations.
2. What is it that occurs at the beginning of the semester that causes all of these problems?

A complicated part of the picture is that the response time may or may not correspond to the user experience. The overall response from faculty this past summer is that D2L has been stable and working well. When this crisis happened, a lot of people informed us that they were never happy with D2L. So we do not have a clear view of customer satisfaction. The process takes well over a year including holding focus groups and conducting surveys. It may be time for us to start this process. Given the current environment, what are some options in terms of better assurance of reliability, scalability and performance?

Is there something that we need to do in terms of faculty education around technology? We have to get faculty to understand that even when a system fails, teaching must go on. As we explore ways to improve D2L, we might want to look into adding a content manager to D2L.

We are very close to having full redundancy of D2L at our secondary data center. By the end of this calendar year we should have the ability to failover in less than 30 minutes.

Rhonda Ficek suggested the following:

Maybe we should explore some different configurations. If regional centers were added, then all 32 institutions wouldn't have to go down every time there was a failure. All the service level agreements that we need to maintain a particular amount of reliability are very expensive. Perhaps we should explore the cost-benefit of regional vs centralized models in general, and enumerate service level agreements and other costs because they may be adding expense. Also, upgrades to newer versions of the software are hampered when 32 institutions must agree on the timing, etc. of the upgrades. Some regions may desire to upgrade to the newer version of the software more quickly than others for innovation and "bug" fixes", etc.

Rhonda also suggested that there be faculty input on any Service Level Agreements because their perspectives are different than an IT perspective.

Carol Lacey stated that Metro State has a new procedure where faculties have to verify that their students have been participating in class within the first x amount of the semester for both on-line and in-person classes. If a student cannot get into the system or a faculty member cannot provide verification, then there is a huge problem. This is directly tied to financial aid release and could cause significant ramifications.

3. **Tools**:

Search Feature in the Discussion Bodies: The subject field can be searched, but the bodies cannot be searched. There is something wrong with the way the D2L query is written. We can get this turned back on, but people will have to understand that they will need to un-check a box in order to search discussion bodies.

Archive/Purge Update – Mike Condon

There was a meeting at the end of August with some of the larger institutions who finalized some requirements for D2L for their V.1 of the Data Purge. The purge will be granular enough so the user can specify exactly what to purge. The focus right now is primarily course files and the high assets. We are currently working on figuring out what happens to the User Data? There are other schools that would like the ability to archive User Data. Because of our retention policies, we need that data to be purged.

We will be meeting with D2L at the Educause conference. We have already made it clear to them that Purge/Archive is number one on our list. If they do not deliver something by this December, people are not going to be happy with them. Their critical priority right now is Purge as it is affecting system performance.

Action Items:

- It would be worthwhile to identify and bring back to this Council the various classes of information in terms of what should be archived, what should continue to be available to faculty and what can we safely get rid of.
- Mike Condon will get some Archive/Purge information together and post it on the IMS D2L Site.

Respondus Lockdown Browser: We need a strong recommendation from the IMS Council that this is a tool we want to use. The chances of us coming up with the money for this are good. Karen Wenz has asked Respondus for a price quote. If it is over $100,000 it will have to go to the Enterprise Investment Committee for approval.

Competencies and Rubrics Tool: Zala will be hosting a tutorial on October 12th from 10:00 A.M. – 11:00 A.M. via some sort of conferencing tool. There will be information on the CTL website about this.

4. **Help Desk**

Lesley Blicker: We have three levels of service:

- Level 1: Self-service, lost passwords, FAQ etc… This level is taken care of and we are not very concerned with it right now.
- Level 2: Level 2 service has not been fully utilized. These are the kinds of questions that come up about faculty trying to do things in the courses.
- Level 3: Should be set up for the higher level need to escalate questions where campus trainers need the support of our System Site Admins.

Two improvements to be made:

1. The Student Model may not be working for this mission critical application. We may be better off with fulltime staff that is fully suited to D2L.
2. When we first set up permissions, the four System Site Admins. had full permissions. But our helpdesk staff, which included students, was never set up with permissions.

The new model is primarily reliant on trained staff and Office of the Chancellor funds. By using this model, a lot more questions can be resolved at level two without being escalated to level three. The helpdesk will be gaining enough access to information so that they will be able to contact the appropriate department at the user's institutions. For those campuses that have their own helpdesks, if their user's contact the system-wide help desk, they will be routed back to their own institution's help desk.

Permissions: Is this an operational decision or does it need to be decided by the system? Great thought has been given to assigning the most limited set of permissions as possible without affecting work quality. When there is enough concern, it should be a participative issue. But we are spending a lot of money while the help desk is unable to do their job as well as they could be. At this point, the opt-in/opt-out option might be more useful for us. The problem is that each school has a different set of permissions. The teacher-level permissions at each school were used as models, but impersonation is never allowed.

There are ways to simulate permissions into a course without actually giving permissions, such as WebEx or something similar. We will consider exploring an implementation of this.

For now, we need to get information out to people. We will get this on next month's agenda. The goal is to become more efficient and also free up the work loads of our System Site Administrators. We need to consider what the worst case scenario is. Aside from viewing specifics about a course, is there anything a person can change in a course?

5. **Sub-Committees**:

Work groups should be a mechanism to draw on other resources but it is this committee that does the final evaluation and work. There may be a way for us to consolidate our work groups.

The Council agreed on the following Work Groups:

- User Support Models/Best Practices: James Falkofske, Lesley Blicker, Carol Lacey, Zala Frashant
- Current Standards/Performance Metrics (crosses over several categories): John Rohleder

- Risk Analysis/ etc… and Enterprise Data Management: David Bouchard, Mike Condon, Kim Priener, John Rohleder,
- Future Directions: Rhonda Ficek, Nima Salehi, Lesley Blicker, James Falkofske, Sally Johnstone, David Bouchard, John Rohleder, Zala Frashant
- Legal Issues: David Bouchard, Anne-Marie Ryan-Guest, James Falkofske

- Intellectual Property Issues are a concern. This will be included on a future IMS AC agenda.

6. D2L 8.2:

Al Essa strongly advises against upgrading in December. The earliest we could do this from a technical standpoint would be next summer.

Adjournment:

Meeting was adjourned at 1:30 P.M.

Meeting notes submitted by Smitha Pennepalli, Smitha.Pennepalli@csu.mnscu.edu