

Clinical Education Committee
Scientific Foundations Committee
Joint Meeting
January 6, 2012
7:30 – 9:00 am, B-646 Mayo

In attendance: R Acton, S Allen, J Beattie, M Becker, A Belzowski, A Blaes, H Boyer, J Chipman, E Coleman , T Fahrenkamp, G Filice, S Gladding, C Hegarty, A Johns, S Katz, M Kim, K Lee, A Maddy, A Minenko, P Mulcahy, B Murray, C Niewoehner, J Nixon, J Norrander, J Pacala, D Powell, D Power, J Prunuski (D), M Sanders, E Santos, A Severson (D), P Southern, T Thompson, K Watson, T Weinhaus, K Wickman, M Woods

Staff: B Clarke, A Edverson, G Gallagher, M Hilliard, B Nesbitt, S Mowbray, M Tuller

Guests: A Breitreutz (Dul), M Coleman (Dul)

Absent: K Brooks, G Giesler, R Kempainen, S Levine, T Mackenzie, L Schimmenti, D Wangenstein,

Action Items: for January 6, 2012 meeting (details of discussion follow)

1. Meeting Minutes December 2, 2011

Minutes for CEC and SFC were not reviewed due to time required for Black Bag Curriculum and Learning Management system demonstration and discussion. SFC minutes are available at *SFC Moodle Site* <https://moodle.umn.edu/course/view.php?id=23483> and CEC <https://moodle.umn.edu/course/view.php?id=23362>

2. Regarding Curriculum Governance and Oversight

Plans for the February meeting will focus on several avenues for raising questions about making changes to the curriculum and/or courses. Included there will be examples for circumstances in Duluth and TC for changes. These scenarios will help to illustrate how the new Governance structure supports information sharing and discussion. Course and Clerkship directors were asked to think about changes they've attempted to make in the past or would like to make. At this time course and clerkship directors will have a chance to talk about how they would approach this process under the new structure.

3. Black Bag

Central oversight of the curriculum is also part of the LCME ED-33 Standard and curriculum management provides the details for the education organization to identify what is being taught. The LCME Standard requires UMMS administration to understand, within the curriculum, the breadth and depth, and the gaps and linkages that exist both horizontally and vertically across the curriculum. It has been determined by the Education Council that Black Bag will be used to perform curriculum management functions for UMMS. Dr. Watson provided a snap shot of steps taken on the TC campus and the timeline involved, which began in 2002 (see attached Timeline document).

January 6, 2012

Information

NBME Subject Exam Reviews

Dr. Woods noted that Dr. Powell and the faculty for Principles of Pathology participated in a review of the NBME subject exam for pathology. Dr. Powell reported that the review provided an opportunity to understand the complexity, length and format of questions used on the USMLE Step 1. This opportunity is available for clerkship and basic science subject areas and can take place once per year per subject. Leslie Anderson, Assessment Specialist for Medical Education, will contact course and clerkship directors to identify the subject exams that would be most applicable to their course and to agree upon a date for faculty review. Because the reviews must be proctored, they must be arranged in advance and conducted in a secure environment. The goal is to do several of these a year, eventually examining all categories and subject areas.

Curriculum Governance and Oversight

Based on recommendations from the Mock Site Visit Team it was determined curricular governance and oversight is unclear and has no defined process to raise questions, make changes or improvements to the Curriculum. The new Governance and Curriculum Oversight document was developed by ESC and reviewed by EC and the course committees (SFC, CEC, CUMED). After the course committees' discussions, revisions were made, and it was endorsed by the Education Council. The document spells out the mechanism by which oversight and curriculum design will occur, members were asked to become familiar with its content.

Dr. Watson noted the governance structure is new and it's realistic to consider changes may be needed after several opportunities to use the structure in its present format. The structure should be viewed as an on-going improvement to Medical Education functions. Course and clerkship directors can expect to discuss all areas of the governance process at the February Meeting.

Dr. Watson confirmed that the Education Steering Committee is a subcommittee of the Education Council appointed by the Dean. In response to a previous discussion the membership lists for the Education Council (EC) and the Education Steering Committee (ESC) were provided. She noted that there is membership overlap with EC and ESC with some variation. More discussion about the flow between committees can be considered at February's meeting.

Discussion

Black Bag

To accomplish curriculum management at the level required by LCME, much effort was devoted to finding a system that would meet all of the areas that need to be tracked, monitored and reviewed. The first iteration of a management database was home-grown and searchable, but after a period of time the level of complexity needed wasn't available in this system. Once this system was no longer usable a number of systems were identified and researched in depth. As indicated in the "Timeline" many factors were considered as part of the research. As the search for a system continued and as each option became unworkable, Matt Coleman at Duluth developed Black Bag to meet the LCME Standards.

In November of 2010 it became known that LCME required a more sophisticated look at learning objectives at the course level and the ability to map those for the demonstration of curriculum management, integration and oversight. A comparison was begun between systems that were being researched and what Duluth was able to accomplish with Black Bag. Over the next months at weekly sessions with IT staff on both campuses, they reviewed Black Bag. When a detailed review was completed by Medical Education Administration (including the Dean), it was clear that Matt Coleman's program design of Black Bag provided many advantages over other possibilities

Mark Hilliard is the instructional design specialist who works with course directors and coordinators in implementation of Moodle for courses across Yr 1-4. He spoke as an expert in application of Moodle 1.9 and 2/0 in managing individual courses. He noted Moodle has worked well for most course directors but it is not a learning management system, and the needs of a professional school are very different from those in undergraduate programs where Moodle is a good fit. In his observation the application of Black Bag will be much more effective in managing Medical School courses and curriculum with much more complex, requiring closely managed content and outcomes.

Matt Coleman, a member of the Medical School - Duluth IT staff, developed his system based on the needs of students and faculty at Duluth. A focus group of Duluth and TC students concluded students wanted their information all in one place for schedules and to get all learning assets. This system provides a number of different capabilities when compared to other systems, which include the following:

- need for long term data on high stakes exams that test cumulative knowledge over years, Moodle data is archived after 2 years (all MS need access to 4 years)
- access to reporting of data

- mapping of the curriculum with objectives as an integral part of the complex course materials
- calendar which links to the course materials and displays schedules clearly
- Step 1 USMLE study preparation: students can search for topics where they have weaknesses
- course and course asset size is not an issue
- we have a in the design of the system so can tailor it to meet our needs
- One-stop access to the calendar and course materials
- existing assessment items can be imported and Black Bag provides an analysis of student outcomes by item
- we have access to the data
- Black Bag is user friendly for the students and faculty
- Flexible – faculty and students can have input into the functions needed
- Faculty can review the curriculum from the other campus, with the potential to further integrate and understand the entire medical school curriculum

Faculty development will be provided on-line for each feature; Dr. Alan Johns noted that he found Black Bag to be very intuitive

E*Valu and CoursEval will remain as evaluation systems for at least the next year on the TC campus. They will either be incorporated through Black Bag or it will be determined how Black Bag will take over the features. It is a priority to make it possible for current MS-1s to be able to look at their Year-1 materials through Black Bag. If this isn't possible it will remain available in Moodle in the archives.

Database, server support and maintenance at Duluth are very positive and service oriented. Matt and the other IT staff at the UMMS-Duluth have a strong working relationship and open and frequent communication. The Black Bag database is backed up daily, weekly, monthly, etc. The entire disk image gets backed up, if there were a crash they would just restart the program and reload the backed up data. The system supports fully usage from many different remote locations. Matt noted there hasn't been an unscheduled outage in the past six or seven years. Josh Richards and the other Duluth IT staff regularly communicates with Matt and the other Medical School staff to be informed of the service needs for Black Bag, scheduling of server fixes and/or other service needs is done at the convenience of the students and the School's convenience. Once the School is consulted, emails and banners are posted to alert users to timing of a shut down. Typically work-times are scheduled for a two-hour period, but often only require a short period of 5-10 minutes before the system is back on-line.

Due to UMMS past experiences with various systems, concerns were voiced regarding the Black Bag system's ability to handle the increased data generated when the TC Yr 1-4 students are added. Matt responded that the system can readily handle the total 2-campus number of students enrolled in the School; there would be concerns if the numbers were in the 100 thousands. To meet the needs of the MD Program enrollment, a process called load balancing (more than 1 server) will help to prevent issues.

Regarding concerns for the size of Duluth's development team, Matt is the primary developer and he has communicated these same concerns to the Medical School administration. Several things are taking place to resolve those concerns in case there would be an emergency;

- B Senske (UMMS-TC IT staff) has the software installed on his laptop, he has full access to the source code and has been working with it for several months
- A Breikreutz is a new programmer who actually works for the TC campus, is located on the Duluth campus and will work directly with the TC campus.
- The source code is in PHP, using a home built framework which is a standard industry format (the system is built in a very modular setup).
- All security goes through this framework, if there is a security issue the form library is fixed
- The form library takes care of Black Bag and other software such as the Admissions software
- Matt has worked in Moodle source code and the code for Black Bag is easier to understand.

Next Meeting: SFC February 3, 2012