

Scientific Foundations Committee
Meeting

May 6, 2011

7:30 – 9:00 am, B-646 Mayo

In attendance: S Allen, L Anderson, M Becker, A Bleas, B Clarke, W Donigan, G Filice, S Katz, K Lee, S Levine, A Minenko, C Niewoehner, J Norrander, L Perkowski, D Powell, L Schimmenti, P Schlievert, D Wangenstein, K Watson (@ CEC), T Weinhaus, K Wickman, R Wong

Absent: E Coleman, B Fleischmann, G Giesler, R Hoffman, M Hordinsky, T Killeen, N Lipin, T Mackenzie, K Nordby, M Sanders, B Varda, M Woods

I. Minutes

Minutes for February 4th, March 4th and April 1st meetings were reviewed and approved with no changes or additions.

II. Information

Comprehensive Basic Science Exam scores

Leslie Anderson reported that the CBSE exam was administered on March 15th so student scores would be available to help guide studying for their actual Step I exam. It was formerly used annually for TC students, but it has not been given for the past 10 years because of budget constraints. The Duluth and MD/PhD students have continued to take it annually and the TC campus will again administer it annually.

Individual subject area results are illustrated by a bar graph and the 2010 scores will be used as a baseline. They will be compared to USMLE Step I scores when available. After reviewing the subject area results, SFC members voiced concerns that the scores are predominantly at the “borderline” range. Dr. Marilyn Becker explained students took the exam without any preparation. Most importantly they appreciate the opportunity, value the experience and better understand the real process they will have when taking their Step I. A common thread heard from student is they recognize that now they need the time to study and prepare in a concentrated way for the Step I. She also noted that some scores are influenced by test taking skills and some students rush through without comprehending the need for thoughtful responses. These factors add to their scope of experience in preparing for the Exam. The scores are similar to those received previously by UMMS students and those who are unhappy with their scores recognize they need more self assessments.

Concerns were raised that students become stressed and less engaged in their courses as they approach their Step I exam. Dr. Becker responded that they’re course work doesn’t always allow time to pull the pieces together and the study period after courses end allows this to become their focus. The opportunity to work at their own pace and on their own weaknesses allows them to better understanding for what was covered in their courses. Dr. Becker added that those who did not do well are motivated to understand why their score is low and how to resolve the problem. Scoring poorly at this earlier time is better than having to repeat the Step I as a result of failure. She noted there are many variables for each student and each need to resolve them in order to be ready. Course directors asked if more time should be set aside for preparation, perhaps 4-6 months in combination with more personalized guidance from the Medical School.

Dr. Perkowski reported that an added reason is to assess and identify if there is comparability between the TC and Duluth courses. Duluth has administered the CSBE over a number of years and the current

results indicate on about a 2 point difference between the two campuses. It should be perceived as training, literature shows that repeated testing over and over as the most productive method for students to learn. Their use of self-assessments is important after the CBSE to guide them in their study of deficient areas. Also the scores from this exam should not be seen as a commentary on specific subject areas. Course Directors should consider a review of the CSBE exam questions, which can be arranged as a group for a specific date and time in one location. Dr. Deborah Powel added that seeing the question format and content is very valuable to their teaching. She pointed that as 2nd year students the scores in histology, anatomy and embryology are among the highest. Seeing this as a trend is a very strong indicator of their learning. Dr. Perkowski will make arrangements for those who want to participate in reviewing a sample of the CSBE, all course directors will be contacted for their availability.

III. Update

Embryology

Dr. Anthony Weinhaus an update from the Embryology work group, who have been met to discuss aspects of redesigning the current course. Work group members are Drs. R Acton, M Cook, S Katz, M Sanders, L Schimmenti and A Weinhaus; they have met several times since the April 1st meeting. Fall Semester 2011 is the projected kickoff, the following include areas of discussion:

- rewrite course objectives
- approximately 12 sessions
(student feedback “strongly” recommends including live lectures)
- included through Years 1 and 2
- work with Duluth to resolve faculty retirement and a course with components they can use

Dr. Perkowski reported that Dr. Robert Acton went to Duluth to discuss their needs and to determine what portion can be a bi-campus course. He will bring a proposal to the Education Steering Committee on May 16th. Dr. Weinhaus noted the Work Group will meet again on Tuesday, May 17th. The goal is to resolve these concerns during the next two weeks. Dr. Mark Cook teaches embryology in other AHC Colleges and is a possible course director. The Scientific Foundations Committee will be updated when more information is available.

IV. LCME

Dr. Perkowski's update indicated that all Subcommittee Reports are soon ready to be submitted to Dean Friedman and the Regional Dean Davis (chairs) for the first round of review. She reminded SFC members that the current academic year is target for the Basic Science curriculum being reviewed. Because of changes to the Curriculum, not all data is available for review and will be added to the Reports as it becomes available. With that in mind, Course Directors will be contacted for more data. The Database will be completed by the end of the summer. The LCME Steering Committee in the process of identifying consultants to carry-out the Mock Site Visit, sometime during the first part of October. Dr. Perkowski also reported that the Medical Student Subcommittee Report should be completed within the next week. Points related to strengths and weaknesses, being identified by Subcommittees. There elements that cross all of the Medical Education Committees and will be discussed in upcoming committee meetings.

V. Annual Course Summaries

ECM – Part IIb

Dr. Sharon Allen noted that the ECM Part IIb is a continuation of Part I and Part IIa with this segment ended early in March. Two major components include clinical skill building and introduction to core topics in the social science aspect of medical core and bioethics. The learning outcomes are basically the same that occur in Part I and IIa; demonstrate effective communication and interviewing skills,

conduct a complete general head-to-toe physical exam, and demonstrate medical record documentation. An additional component is demonstration of presentation skills and clinical reasoning skills through hypothesis driven physical examination. The learning outcomes for the Wednesday sessions were to discuss the core topics in bioethics and social science disciplines and apply them to clinical scenarios.

Students were evaluated several different ways to establish evidence that the outcomes are being achieved. The required clinical skills components included weekly write-ups on patients seen in the IERC (all written materials were reviewed by faculty) and weekly quizzes to assess understanding of medical terminology at the end of each IERC case. In addition quizzes were given at the end of the standardized patient interview in relation the physical history. Also there were several workshops throughout Part IIb. Assessment components included practical exam for medical history, a practical head-to-to exam, and practical write-up and oral presentation. Students interviewed standardized patients in the IERC using focused physical exams for a case and completed their write-up using a template. Whatever time was remaining of their 15 minute block was used to perform head-to-toe examination. All aspects of the practical assessments were done in the IERC. Small group facilitators reviewed the written portion, provided feedback to each student, assigning a grade of “satisfactory”, “unsatisfactory” or “outstanding”. Quizzes were open book, 100% was required and could be taken as many times as the student(s) chose. The small groups were generally 3-4 students in the IERC when taking the clinical skills portion, most scored very high. Dr. Allen provided details for student performance and their overall evaluation of the course, changes to the course for 2011-12 will come as a result of this information (see PowerPoint).

Dr. Allen noted that the newest assessment component involved the written medical history and individual presentation to a faculty member. The 15 minute session includes taking a medical history, completion of the write-up template, and their presentation. These are reviewed 1:1 by a faculty member who uses a checklist to assess their performance. The scoring includes specific points students must identify during the history and then address in the presentation portion.

What Works Well

- instructors running the interactive sessions
- ECM Facilitators present topics in clear manner
- large group presenters in Social Science/Bioethics were well received

Concerns

- better correlate online quizzes with content for communication group sessions
- groups too big, need more opportunities for individual presentations
- poor organization of IERC on Moodle
- large groups redundant and unnecessary, more small group time requested
- make communication sessions more relevant and productive for MS-1 level knowledge

Planned changes for 2011-12

- make Moodle site easier to navigate
- make communication workshop more individualized
- on-line quizzes will directly match the cases
- adjust IERC cases simulate case findings to support teaching hypothesis driven physical (HDP)
- revise pediatric workshop to incorporate patient stations
- increase amount of small group time in social science/ethics curriculum

SFC members voiced concerns with several issues; the number of faculty needed to facilitate groups and participate in the assessment of clinical skills. Dr. Allen confirmed that the need for faculty needed for small group sessions is becoming more difficult and noted they are working on getting more for Fall, 2011. With regard to the questions of ethical nature of poorly written and constructed medical

record/notes they will find in hospital settings, Dr. Allen responded that during ECM students work with a template based on the electronic medical record.

VI. Discussion

Implementation of Grading Policies

Dr. Perkowski reported the revised Grading Policies were approved at the April 19th Education Council meeting and will become effective in August, 2011. Some changes in wording were just approved on May 5. She pointed out that both the TC and Duluth campus have the same grade policy and scale, which is a big change. This is important to comparability across both programs for the students who are transferring and for LCME compliance. Both campuses will have pass/non-pass and honors. Some aspects have already been in place; a criterion based reference with a standard of 70% of the total points of the course and 70% is required to the final exam. Up to 66% of the points to pass can be determined by the exam score. Course directors asked what will appear on the transcript for “honors”. Dr. Perkowski responded that the exact grading designation for “honors” will be determined and faculty will be informed, Dr. Katz confirmed that the ESC preference is an “H”.

Questions raised regarding specifics of implementation included:

- **Q:** the required 70% of the cumulative points available for the entire course grade, for Fall 2011 semester students discounted the importance of a discipline and 25% of the class failed the exam due lack of preparation
 - A:**
 - course director can set the percentage of weight of exam at 66% & below and determine what else is appropriate to pass a course (not just exam)
 - students will be assessed for their entire professional lives on synthesized knowledge;
 - difference between t Course Grades and Exam Grades Policy is course directors’ added opportunities to assess knowledge outside of an exam,
 - exam doesn’t comprise the whole course assessment,
 - other points (knowledge) to be gained by the student to pass whole course.
- **Q:** MS-1 asked with regard to a course with 3 separate exams, will each exam require a 70% pass rate to pass the course?
 - A:**
 - there will be 1 exam requiring a 70% (of total exam points) as the pass threshold
 - one standard of grading must exist for all course, to meet the LCME requirement for comparability across the curriculum
 - for LCME the level of comparability encompasses both campuses
- **Q:** not all courses have had an “honors” component, how that can be achieved
 - ESC decided it was important to leave the determination for “honors” up to each course director due to differences in courses
 - “H” grade must also be criterion referenced, it should be a compilation of things (example, students’ fulfilling course evaluation should be a component required in determining “professionalism”
 - “H” should represent what the course director decides is a demonstration of an outstanding student
 - no one formula would work across courses and across both campuses
 - current full year Honors will still exist, based on total points, used for AOA, etc.

Discussion continued for specific methods to determine an honors grade; with a number of measures identified. HD1 begins next week and Dr. Powell provided information for their process to determine the “H” designation. Dr. Niewoehner suggested the academic year of 2011-12 will be trial and error for course directors in determining their criteria for assigning “H” grades.

With regard to Exam Grade Policy, Dr. Perkowski noted that as a result of fewer courses, the COSSS Policy now requires that if a student fails 1 course, they are required to appear before the COSSS members. With regard to Exam re-takes, the course director no longer can make the automatic determination to give the student a “retake exam” or require that they re-take the course. After review by COSSS, the result will probably be similar, but the decision will now be made by COSSS. This will be the process on both campuses. The Exam Grade Policy also requires a 70% to pass for the exam. All courses are required to have a final, but it is not required that they be comprehensive. However because the threshold for passing the course includes 70% on the exam, the exam must be representative of the course. The thought is that the student understands the discipline and it means that the student, in the opinion of the course director, has some mastery of the subject matter.

Dr. Perkowski asked for input from SFC members to help make this information more accessible to everyone. These Policies are posted on the Course Directors Website, are there other ways they can be shared that will be helpful for all? Course directors requested placing Policies on the Medical School website under Policies and to include the link in email communications.

Student Evaluation of Courses

Dr. Karla Hemesath provided a draft of a new plan for students evaluation of each course. Due the poor response over the past academic year, course directors have requested a more comprehensive mechanism. A few of the points that will streamline the process include:

- All students will be required to respond
- Non-compliance will affect students’ rating in regard to “professionalism”
- Will streamline the questions and the number of questions
- Standardize the response scale to be the same across all courses
- Use a 5 point scales , match this with the scale points used by the University
- Evaluate faculty only once

Suggestions were made by SFC members and Dr. Hemesath will make changes and present the new format to the course directors.

Next Meeting: June 3, 2011