Minutes of the Core Review Committee
8 October 2009

The CRC met on 8 October 2009 at 11:00 AM in the GIS conference room (SLC 143).

Members present:  Brian Whitman, KarenBeth Bohan, Greg Castelli, Andy Miller, Amy Patton, Philip Simon, Ernie Trujillo

Guests present:  John Harrison (Chair, Math/CS Dept), Barbara Bracken (CS), Tony Kapolka (CS)

Dr. Whitman called the meeting to order. The minutes of 6 October 2009 were approved.

New Business

Computer Literacy Skills Assessment

Dr. Whitman began the meeting by pointing out that the CL artifacts from last year show positive results: with one exception, all outcomes were above 80% proficient. Dr. Bracken cautioned, however, that more artifacts were needed to obtain a representative sample. The Summer Subcommittee concurred.

Dr. Kapolka pointed out that, although most students choose CS-115 (Computers and Applications) to fulfill the GenEd requirement, any course higher than CS-115 also will. CS-115, he noted, is evolving.

The optimal time for students to take CS-115 was discussed. Dr. Harrison reminded the Committee of the “backfilling problem” he had discussed with the Summer Subcommittee: because many upperclass students were unable to enroll in CS-115 as freshmen, they fill half the seats in the course, closing out sections and preventing many freshmen from registering for it. Thus, although the course is geared towards entry-level students, many take it later when it is of lesser value. Although many incoming freshmen are already computer-savvy, roughly one third “are terrified” of computers and greatly benefit from the course. Mr. Castelli noted that many students arrive with superficial computer skills — they can write a basic Excel spreadsheet or use Facebook — but do not yet know how to do more complicated things. Moreover, the conceptual aspects of the course (ethics, terminology, underlying hardware and network structures, ...) are valuable. Dr. Bracken pointed out that there should be an assessment objective for terminology: RAM, CPU, speed, and other terms which graduates must understand to be educated consumers. Several committee members quipped that upperclass students in their courses still do not know how to do more complicated things.

This led to a discussion of what is appropriate coverage for the course. Dr. Harrison pointed out two extreme attitudes towards the course: should it teach what’s good for students to know, or what students need to survive in their major? Many upperclass students have the latter attitude towards the class. Dr. Kapolka described CS as “an application in search of a discipline” — 115 was an ideal pairing for the Learning Communities, several years back: when paired with a course in another discipline, real-life problems from that discipline could be used as context. Aside from the scheduling problems associated with LCs, there are not enough full-time faculty in the Math/CS department to support such targeted courses. Dr. Bohan suggested that faculty from other disciplines could provide problems, but, as Dr. Kapolka pointed out, without the second course of the LC, the CS course would need to teach the (chemistry, pharmacy, etc.) background for the problem in addition to the relevant CS solution. Other ideas included the use of an on-line component of the course and a store of real-world problems applicable to various disciplines. All these, however, would generate staffing and prep-time complications.

When it was noted that there are sufficient sections of ENG-101 for (nearly) all students to take it as freshmen, the discussion turned to the nature of GenEd courses. Some, like CS and ENG-101, are in the
core as essential skill requirements. These are best taken early on. Other courses are in the core as distribution requirements. These can be taken later.

What can the CRC do to help with the Math/CS Department’s staffing issues? Dr. Harrison requested that the Committee “tell the Administration that [CS-J115 should be in a student’s career as early as possible.” Dr. Miller suggested that this could be phrased as “We’re not meeting outcomes because...” Dr. Bracken requested that the CRC make the assessment outcomes more relevant. Ideas for outcomes included computer-related ethics and using technology to solve problems. The latter outcome would necessitate critical thinking. Dr. Kapolka warned the Committee to be specific in its terminology: do we wish to “teach ethics” or teach about academic honesty and provide familiarity with U.S. copyright law? Dr. Bohan added that it is best to conceive outcomes as “We want students to ... as evidenced by ...” Drs. Bracken and Kapolka will develop a more relevant set of outcomes than the ones used last year and bring them to the CRC for use in this year’s assessment cycle. Dr. Bohan pointed out that the realization that last year’s outcomes are not truly relevant is an example of the assessment process in action.

Quantitative Reasoning Skills Assessment

Dr. Harrison began by distinguishing purely calculational math courses from conceptual math courses. Math is an appropriate home for the QR outcomes because it is the science of abstraction, which is a key element to critical thinking. As these abstracting skills are not taught in the calculational courses (eg, MTH-94 [college algebra], and -100 [precalculus]), they do not satisfy the GenEd requirement.

Many students, Dr. Harrison reported, have bluffed their way through their high-school math courses, but the math placement exam requires that they show their hand. Most students want to “get [the math requirement] done and out of the way” so they can pursue their major. This led to discussion of students entering Wilkes have already chosen a major. The Committee agreed that two years of general study before formally declaring a major would be beneficial to students: they could come in with an intent to major in a subject, then have time to show that they have an aptitude for it before committing. Ms. Patton cautioned, however, there would be great resistance from parents and the Marketing office.

Dr. Simon asked if it was necessary to make the QR outcomes more robust. Dr. Harrison felt they should be and will work on it. He described two distinct groups who take math: science students in very vertical majors who need strong computational skills, and non-science students, who need a more conceptual literacy. As only non-science majors take MTH-101 (Solving Problems Using Math), Dr Simon suggested that 101 would be the best place to test outcomes. Similarly, the Summer Subcommittee contemplated the assessment of traditionally math-phobic subgroups, to assure that Wilkes meets a minimum standard requirement. Dr. Harrison pointed out, however, that we must decide whether the standard should be along the lines of “calculation at the 9th-grade level,” MTH-100 skills, or problem solving skills.

Dr. Bohan asked what outcome we want all Wilkes graduates to have, and Dr. Whitman followed up, asking where the line between college-level and high-school math lies (as distinguished from asking which math courses bear college credit). Dr. Harrison described MTH-94 and -100 as “boot camp;” MTH-101 is the first true college-level course. Thus, the GenEd requirement (MTH-101 or higher) is appropriate. Should the requirement emphasize big-picture concepts or computational techniques? Noting that many education majors return for master’s degrees, Dr. Simon argued that our graduates should be prepared for a statistics course in a master’s program. Dr. Harrison responded that descriptive statistics are covered in MTH-101, but cautioned that, were Algebra 2 skills (ie, 10th grade math) required of all graduates, a significant portion of the student population would be at peril. He offered to review the GenEd objectives for QR, and agreed that more data from MTH-101 are necessary. (Last year, 8 artifacts from MTH-101 were received.)

Dr. Bohan asked whether a standardized proficiency exam would be appropriate. Dr. Harrison reported that the math department is considering this idea, as well as a gateway test. While calling all students’ hands is necessary, there will be many students unable to pass it. Further questions for the Committee include: When is assessment appropriate? Do we want a gateway exam, which students must
pass to graduate, or an assessment tool. Dr. Harrison noted that the creation of a one-size-fits-all assessment exam will be difficult. Dr. Simon further cautioned that faculty might begin teaching to the test, similar to the situation in high-schools under no-child-left-behind. Nonetheless, good gatekeepers with standards and trustworthy assessment data are imperative. In practice, this depends on quality adjuncts.

Communication with the Deans’ Council

Dr. Whitman reported that there will be a Deans’ Council meeting next week. Ellen Flint informed him that the CRC can use the Council to communicate with the faculty and to encourage departments to submit information in a timely manner. Dr. Simon sensed that Dr. Flint meant that the Dean’s Council will help the CRC to obtain a WAC proposal from Integrative Media. For most needs, the Committee decided it would keep the requests at the Faculty level, although it will bring them to the Deans’ level if there are problems obtaining information.

The situation with Integrative Media’s WAC proposal prompted the question whether there would be a WAC section in the MiddleStates Review. Dr. Bohan explained that there will be, but since participation is nearly campus-wide and we do have a plan, the lack of a proposal from IM should not be a problem.

Adjournment

Respectfully Submitted,
— Ernie Trujillo