

Minutes of Math Issues Committee

October 16, 2009

Southern Connecticut State University, Adanti Student Center, Room 306

Present — Elaine Dinto (NVCC), Paul Edelen (MCC), Lori Fuller (TxCC), Pat Hirschy (ACC), Sal Maimone (NCCC), Marina Philips (HCC), Rachael Schettenhelm (GWCC)

Meeting called to order — Committee members asked Pat to serve as interim Chair in Miguel's absence; Pat called the meeting to order at 11:12 a.m. Rachael reported that Miguel's surgery went well and that he is home and in good spirits.

New Committee member, Marina Philips, was welcomed by the group.

Minutes from the September 11, 2009 meeting were approved; thanks, Teresa!

Old Business: Intermediate Algebra —

Discussion related to similarities and differences of the varieties of Intermediate Algebra across the system, including MAT* 136, 137, and 138, and on differences in MAT* 137 itself. Are we serving our population for the next course? If not, what solutions can we find?

- In the CC system, faculty consider intermediate algebra to be a preparation course, a pathway course, not a terminal course, although some students use it as the latter.
- The purpose of intermediate algebra is to serve as a pathway to prepare for *many varieties* of the next course.
 - Students who take intermediate algebra go to liberal arts courses, statistics, and other "terminal" courses as well as to higher level algebra-based courses. Should we do things differently for our different populations?
 - In some colleges, students take college algebra after intermediate algebra, and in others they go directly into precalculus. Some faculty believe that intermediate algebra on their campuses does not appropriately prepare students for precalculus; is there is a need for college algebra at these colleges?
- Due to the nature of their populations, colleges still have different cutoff scores on the placement test (within the agreed-to band for entrance into intermediate algebra).
 - Some faculty believe that their placement scores are too low.
 - Some colleges require a higher placement score to enter precalculus than other general education math courses; others do not.
 - Low placement scores, in the end, do not help.
- The proportion of people entering our schools with very low achieving backgrounds, very weak skills, is much greater at some colleges, often in urban areas, than others.
 - Some schools have very rigorous elementary and intermediate algebra courses; a combined text serves them well.
 - Some schools repeat topics from MAT* 095 in MAT* 137, some do not.
 - We have two different populations in intermediate algebra, and some students fail because the bar is too high. Some students need the skills but not college algebra and higher level algebra-based courses; it would be a disservice to them to bring the level of intermediate algebra down.
- There are a number of creative things being done to aid student retention.
 - Some colleges have tried 4-credit courses, with mandatory labs; this has caused scheduling and adjunct nightmares.
 - SCSU has tried separating intermediate algebra into sections for those who go to liberal arts math versus those who go to college algebra; this has been problematic because students changed their minds about their paths.
 - NVCC offers MAT* 137 using a variety of modes of delivery (traditional, computer, reform); one problem is that students do not know their learning styles and place themselves inappropriately.

Old Business: Accuplacer and other placement issues —

- Is our placement process comprehensive enough? Can we come up with a vision statement? What are the things we can do? What do we want to do?

- In general, Committee members agree with the AMATYC Position Statement on Initial Placement of Two-Year College Students into the Mathematics Curriculum (<http://www.amatyc.org/documents/Guidelines-Position/Placement.htm>). What ideas can we use from the statement?
 - After placement by Accuplacer, should we look at other tools to determine whether the course into which the student is placed is the appropriate one for the student?
 - Vision: incorporate multiple measures for placement, such as high school transcripts, rank, whether or not the student has completed algebra 2 and what grade he or she received (this information would need to be available online).
 - Should math faculty be more directly involved in placement, especially for the borderline student?
 - Do we assess attitudes and learn about situational issues, which are a very important component of learning? Should students take a Myers-Briggs personality test?
 - Should review sessions or other opportunities to prepare for the placement test be provided? Are there any that work? Do students really take advantage of them?
- Re: Accuplacer issues —
 - Can we identify key research questions that we, as a community college system, can address, and then go back to our colleges with questions? Specifically, can we find information about success rates attached to Accuplacer for college level math in general and for precalculus?
 - Some students register late, thus take Accuplacer too late to get into the appropriate course.
 - What do we do to ensure that students understand the procedure, i.e., do students get information about what to do if they do not like their placement? Rachael will bring to the next meeting her handout of what students should do if not satisfied with their Accuplacer scores.
Notes: At Gateway, Rachael gives a 6-question quiz; if 5 or 6 questions are answered correctly, students receive study materials, then take an exam in the course into which they were placed; if they pass, they place into the next level. At Northwestern, all counselors are trained to give and grade a quiz. At Housatonic, students can move up if they answer 8 of 10 questions right on a quiz.
 - Some faculty took Accuplacer at home: (1) it does contain questions about background; (2) the EA test does contain elementary algebra, not intermediate algebra, questions; (3) an EA score of 70 may not even be appropriate for placement into intermediate algebra, never mind college algebra or precalculus.
 - Cutoff scores on the CLM for placement into precalculus vary widely at our colleges.
 - Ability to benefit (ATB): the college decides the ability to benefit in order to get federal money to take a course. Pat will find out how this is handled.
 - Rachael will be attending a system-wide meeting on Accuplacer, at Manchester, to review some of the new questions.

New Business: Discussion of elementary statistics/quantitative literacy with MAT 09x prerequisite —

- Pat asked for information concerning curriculum issues that were considered at schools that changed from MAT* 123 (statistics with elementary algebra prerequisite) to MAT* 16X (statistics with technology and intermediate algebra prerequisite). Asnuntuck is considering a change from MAT* 123, as, considering student backgrounds, it is not possible to accomplish both descriptive and inferential statistics. The college has a small number of math students; the goal is to offer for these students a course in quantitative literacy, i.e., a terminal course in descriptive statistics, with a strong general education emphasis; she is seeking to customize the course, to make it relevant for students.
- There are other courses system-wide that have only a MAT* 095 prerequisite, including MAT* 109, Quantitative Literacy, as taught at Manchester. Paul will share his syllabus for MAT* 109, which involves critical thinking. While UConn and CSU do not take the course, some private colleges do.

The **next meeting** will take place at 11:00 am, at Tunxis, on November 20, 2009.

Meeting adjourned at 12:34 pm.

Respectfully submitted,

Elaine

Elaine Dinto