

Minutes of Math Issues Committee
November 20, 2009
Tunxis Community College, 7-206, Library Conference Room

Present — Larisa Alikhanova (TRCC), Martin Brock (NCC), Joachim Bullacher (QVCC), Elaine Dinto (NVCC), Paul Edelen (MCC), Lori Fuller (TxCC), Pat Hirschy (ACC), Steve Krevisky (MxCC), Sal Maimone (NCCC), Joy Mark (QVCC), Rachael Schettenhelm (GWCC)

Pat called the meeting to order at 11:02 and previewed discussion times for agenda items.

Approval of Minutes — Minutes of the October 16, 2009 meeting were approved with one correction (Lori was not in attendance).

OLD BUSINESS

1. Placement policies, procedures, and instruments

- a. **AMATYC Position Paper** — Discussion continued (from last meeting) regarding opportunities for looking at the whole placement picture that the AMATYC position paper (*Initial Placement of Two-Year College Students into the Mathematics Curriculum*) affords us (<http://www.amatyc.org/documents/Guidelines-Position/Placement.htm>).
- Everybody is on the same field if using standardized placement tests.
 - If a student does not do well on Accuplacer, there's a message; should he be allowed to brush up and retake the test?
 - Many students do not prepare for Accuplacer; they register and take the test instead of being given study materials. Some practice sites offer 15 or 20 questions; these let students know that are not ready, but do not really prepare them.
 - Is poor performance on the test a reflection of attitude, not just lack of preparation?
 - If a student thinks he is placed incorrectly, what other forms of assessment should we use?
 - Using high school records may require knowing the system from which students are coming, as some schools have inflated scores.
 - Should students be placed as indicated by high school records, then, if necessary, college personnel make the school aware that students are not making it?
 - Should there be a multiple-forms-of-assessment, "college placement team" approach to placement that includes college math faculty as well as counselors?
 - There is intervention at some colleges for students who do not place well; is there data to support that something works?
 - At Gateway, Rachael is doing a study of the success rate of students currently placing into 095 who would not have been so placed in the past by low AR scores; the question is how to measure if these students would be better served by taking 075 first. Should she measure success by looking at 137 grades, then back at the 075-095-137 sequence versus the 095-137 sequence? Is there a way of knowing why students do not persist?
 - Concerns —
 - Many students are not a good judge of their basic math skills.
 - Students must show some responsibility; if their attitudes do not demonstrate readiness for college, they must be challenged to step up.
 - In general, the success rate of those who take any community college 075 and eventually pass 137 is low; can we determine why and do something about it?
 - Do our 095 courses really prepare students well for 137, or only for a credit-bearing course that is below the 137 level?
 - Do we know what percentage of our 075 students are below the ATB level, and if so, what can we do for these people?
 - **Goal** — Find ways in which we may be able to practice some of the ideas in the AMATYC Position Paper on our campuses. **HOMEWORK:** Identify other measures by which your college may be able to judge student placement. Suggestion: to get involved, meet with your

testing coordinator and your IR person; build your plan into your additional responsibilities for next year.

b. **Accuplacer Self Test** —

- Pat reported that members, with setup assistance from their Placement Testing Coordinators, can access the Accuplacer website, enter an appropriate passcode, and take the test. Pat took the EA test as if a strong elementary algebra student and placed appropriately into intermediate algebra.
- We need to wait for more people to take the Accuplacer subtests, trying "different student hats," in order to identify key questions to assess the effectiveness of Accuplacer for our courses. The experience of taking the test may be eye-opening for us in determining if it is a legitimate way to assess. Becoming more educated about Accuplacer will be personally beneficial, and the more we know about it, the better off we will be as math educators in trying to decide if Accuplacer alone is indeed a valid way to place students.
- **HOMEWORK:** All members are invited to participate in this project by taking Accuplacer subtests, as if students, so that we can share informed opinions concerning current placement scores. Make arrangements with your department and placement testing coordinator.

c. **Ability to Benefit (ATB)** — Pat learned from her Dean of Student Services at Asnuntuck, who is also the Chair of the Joint Academic and Student Services Counsel, that the CC system has no quantifiable measure of ATB, rather that each college has the authority to do as it sees fit.

HOMEWORK: Find out what your college's understanding of ATB is. Talk to the college testing person to determine if it tied to some Accuplacer cut-off score (a student should score this in order to be able to benefit from a course), and if so, how it is used. Talk to a financial aid person to determine if it is tied to financial aid somehow. Bring back findings.

2. **Intermediate Algebra**

a. **Accuplacer placement** —

- Colleges have a professional obligation to the system-wide Accuplacer cut-off scores document.
- Some colleges may have lowered scores too much in order to fit into the system-wide band; what can they do if they are not pleased?
 - QVCC placements seemed fine starting with the AR subtest but are not as good since the switch; math faculty would like to raise scores.
- Rachael's project: IR will run MAT*137 grades; Rachael will find placement grades between the new Accuplacer cut-off score of 66 and the old score of 83 and compare differences in course grades. Rachael will send questions to MI members for assistance.
- We need to find out the results of Rachael's study before changing anything.
- **HOMEWORK/Topics to address for next meeting:** (1) accuracy of placement in general at your college and (2) review of interventions that people are doing.

b. **Criteria to differentiate various MAT* 13X courses** —

- As a system, we are committed to the Central Office to differentiate between the courses.
- Across the system, there may be one or two courses following intermediate algebra prior to calculus. Should we have 13X leading to college algebra and 13Y leading to precalculus?
- Norwalk offers MAT*136 which is 4 credits and stops with quadratics; they offer a college algebra course.
- Manchester offers MAT*138 which uses technology and places more emphasis on modeling. It is intended to prepare students for precalculus, but is problematic in that the course is greatly affected by the students in the room.
- Naugatuck offers different "varieties" of MAT*137, i.e., different modes of delivery (computer based, traditional, applied (similar to 138), although outcomes for all sections should be the same and college algebra is the next algebra-based course.
- **HOMEWORK** — **Report back at the next meeting the following, regarding how your college's intermediate algebra course (136, 137, 138) falls into these pieces:**
 - Number of credits
 - Place in curriculum (college algebra (with trig/precalculus) vs. precalculus prior to calculus)

- Content: Does your course cover exponentials and/or logs and to what extent?
- Use of technology
- Function approach
- Modeling (finding model for data; connections to real world topics)
- Steve suggested that we review what is on record in the 05/09/08 Meeting Minutes (www.matyconn.org/MathIssuesMinutes/2008-050908-minutes-MathIssuesCommittee.pdf).

- c. **Continued discussion of generic quantitative literacy with MAT* 09X prerequisite** — Discussion took place at Asnuntuck regarding Mat*109. This item will be placed back on the agenda to include MAT* 135 and 146. **HOMEWORK:** Report back with information about what degree level math course(s) you offer (description, prerequisite) on your campus for a terminal degree (i.e., 3-credit math courses without an intermediate algebra prerequisite).

NEW BUSINESS

1. **Adding ACT scores to placement menu** —

Pat reported that math scores do not come separate in ACT data; if we incorporate ACT scores, an assessment piece must be included. **HOMEWORK:** Bring this issue back to your department to see if there is a need for incorporating ACT scores as a placement tool. Contact Admissions on your campus to talk about the possibility adding ACT scores if indeed there is a need.

2. **Sharing experiences from AMATYC national conference in Las Vegas** —

- Teresa reported that she participated in her second conference with ACCESS fellows, where her cohort presented their projects to the new group; it was interesting to know what other groups were doing. Teresa incorporated MML homework in 095 and 137; it worked well in that students who actually used MML did well, although she has not yet checked data to compare pass rates to those prior. With only two commitments each day, she got to make lots of contacts, enjoy the conference, and learn about what's going on around country.
- Pat reported that AMATYC has reconfigured its teaching and learning committees, and advised members to check out the website. She also reminded the group that AMATYC has **traveling workshops** and suggested that, working with MI and MATYCONN, we host one.
- Steve is involved with international math education and did a poster presentation. He also is involved in the delegate assembly task force, where he is a proponent of changing ways some things are handled. He enjoys getting to see people from around country, to see what's going on, and suggests that we all support the upcoming AMATYC conference in Boston.

3. **New life project (vision for developmental mathematics)** —

Andre attended the New Life for Developmental Mathematics sessions (<http://dm-live.wikispaces.com/Symposium2009>) at AMATYC; Elaine will contact him to see if he is able to come and talk with us about what he learned (<http://dm-live.wikispaces.com>).

ANNOUNCEMENTS —

As indicated in Pat's meeting memo, you may wish to access the following information:

- (1) PowerPoint presentation of Mathematics K-12 Core Content Standards fro College Readiness (able to enter a degree credit math course at a 2- or 4- year college) is available at http://www.math.uconn.edu/~dgross/MBSCC/2009-10MBSCC_LDG_Presentation_CommonCoreMathStandards10-16.pdf; (2) electronic copy of the CSU placement procedures is available at <http://www.math.uconn.edu/~dgross/MBSCC/2009-10MBSCC4CSUplacementalgorithms.pdf>.

Meeting adjourned at 12:30 pm. Next meeting is scheduled for 11:00 on December 11 at Tunxis.

Respectfully submitted,



Elaine Dinto