The Math Department has worked to put in place a few of the things that were proposed by our department Student Equity Subcommittee in the spring of 2010. The group continues to meet to discuss and develop ideas. Below is a report on the progress made thus far.

**The Algebra Sequence: MATH 840/MATH 860**

**Fall 2010-Fall 2011 Initiatives**

1) **Revised Curriculum and New Course Outlines**
The Math Department has rewritten the course outlines for MATH 840 and MATH 860 and they have been submitted to the college Curriculum Committee for their review on October 13th. They will be implemented in Spring 2011. The new outlines clarify the differences in content and level between 840 and 860.

2) **Student Success and Student Satisfaction Surveys**
The department has developed a set of surveys to be given online to MATH E, 840, and 860 (as well as other) students sometime just after the middle of each semester. We would like students to tell us what worked and what didn’t work for them in their classes. We want students to describe their own successful learning strategies and any barriers to success that they have encountered at CCSF. We will also survey students on their opinions about Pass/No Pass grading. Challenge: We will be needing funding to purchase the online tool we hope to use to implement these surveys.

3) **840/860 Cohorts**
Four of our current MATH 840 instructors will teach MATH 860 at the same time next semester and guarantee a spot in his/her class for any student who successfully completes 840 with him/her this semester. Student familiarity with an instructor’s teaching style, testing, and grading practices, gained while in MATH 840, will improve the likelihood of success in the next class, MATH 860. This idea is modeled after the highly successful Math Bridge Program, which targets Black, Latino, and Filipino students and takes a cohort of students through the 840/860 sequence with the same instructor. The consistency of instructional delivery clearly contributes to Math Bridge success. The 840/860 cohort model is a cost effective way of making some of the benefits of Math Bridge available to more students.

4) **840/860 Condensed Algebra Sequence**
The Math Department is offering four sets of intensive short-term sections of MATH 840 and MATH 860 in Spring 2011. Three short-term 840 and one short-term 860 will be offered 2 hrs/day M-F for the *first* 8 weeks of the semester. Then three short-term 860s and one short-term
840 will be offered 2 hrs/day M-F for the last 8 weeks of the semester. This is in an effort to shorten the amount of time it takes students to complete the pre-collegiate math sequence.

One challenge still facing us is registration. We are working on a way to get students registered in both classes at once.

Counselors should recommend this pathway to highly motivated students who have enough time available outside of class to keep up with assignments.

5) Math Study Skills Course  
Goal: Create a college success course that focuses on success in math.  
Target implementation: Fall 2011  
The Math Department has started to look at math study skills courses taught at other schools with an eye toward what should be done here at CCSF. This idea is still very much in its early stages.

6) MATH 860 Competency Exam  
Goal: Create an exam that students could take in order to demonstrate MATH 860 exit skills.  
Target implementation: Fall 2011  
We will start work on creating this exam this year. We will be forming a subcommittee of MATH 860 instructors to write the exam.

We (the Math Department Student Equity Subcommittee) still have a large list of initiatives/ideas that have not yet been tackled. The committee meets biweekly to address our progress, to assess what we should be focusing on, and to look at what we can do next to help bridge the achievement gap in mathematics. We look forward to continuing this work.
October 7, 2010

TO: Chancellor Donald Q. Griffin

FROM: Amy McLanahan, Acting Mathematics Department Chair

SUBJECT: Report from the Math Subgroup of the Chancellor’s Student Equity Task Force

The Math Subgroup of the Student Equity Task Force met on September 29, 2010 to discuss progress in the work being done by the Mathematics Department to address the achievement gap and student equity in mathematics. The following subgroup members were present: Lena Carew, John Tuapola, Carmela Ronas, and Amy McLanahan.

The bulk of the meeting was devoted to discussing the progress made by the Mathematics Department on the initiatives put forward last spring. Questions and comments were posed by the three non-math department members of the committee. The progress on these initiatives, as well as an outline of initiatives still waiting to be worked on, are outlined below.

MATH STUDENT EQUITY INITIATIVES CURRENTLY BEING IMPLEMENTED: Fall 2010-Spring 2011

1) **Fall 2010: Revised Elementary and Intermediate Algebra Curriculum**
   
   We have developed new course outlines for MATH 840 and MATH 860. The new course outlines clarify the differences in content and level between MATH 840 and MATH 860. They are submitted to the college Curriculum Committee for their review on October 13th. They will be implemented in Spring 2011.

2) **Fall 2010: Student Success and Student Satisfaction Surveys**
   
   We plan to survey students in MATH E, MATH 840, and MATH 860 (as well as other courses) each semester.
   
   We have developed a set of surveys to be implemented online within the next few weeks. These surveys will provide us with valuable feedback from students in the areas of student success and student satisfaction. Challenge: We need funding to purchase the online tool that will be used for the implementation of this survey ($200/year).

3) **Fall 2010: MATH 840/860 Cohorts**
   
   We are offering students the opportunity to take Math 840 and Math 860 with the same instructor over the course of a year.
   
   Four of our current MATH 840 instructors will teach MATH 860 at the same time next semester and guarantee a spot in his/her class for any student who successfully completes 840 with him/her this semester. Student familiarity with an instructor’s teaching style, testing, and grading practices, gained while in MATH 840, will improve the likelihood of success in the next class, MATH 860.
This 840/860 cohort program is a cost effective way of making some of the benefits of the Math Bridge Program available to more students. The highly successful Math Bridge Program, which targets Black, Latino, and Filipino students, takes a cohort of students through the 840/860 sequence with the same instructor. The consistency of instructional delivery clearly contributes to Math Bridge success.

4) **Spring 2011: Condensed Algebra Sequence**
   We will offer consecutive short-term sections of MATH 840 and MATH 860 during the spring semester allowing students to complete one year’s worth of math courses in one semester.

   We are offering four sets of intensive short-term sections of MATH 840 and MATH 860 in Spring 2011. Three short-term 840 and one short-term 860 will be offered 2 hrs/day M-F for the first 8 weeks of the semester. Then three short-term 860s and one short-term 840 will be offered 2 hrs/day M-F for the last 8 weeks of the semester.

   One challenge still facing us is registration. We are working on a way to get students registered in both classes at once (as registration in 860 is contingent upon passing 840).

**MATH STUDENT EQUITY INITIATIVES IN DEVELOPMENT: Fall 2011+**

1) **Fall 2011: Math Study Skills Course**
   Our Goal: Create a college success course that focuses on success in math.
   We are beginning to look at other courses of this type that are already in place at other schools, and starting to think about what our course should look like.

2) **Fall 2011: MATH 860 Competency Exam**
   Our Goal: Create an exam that students could take in order to demonstrate MATH 860 exit skills.
   We agree that this is a good idea and will start work on it this year. We decided that there should be a subcommittee formed to write this exam.

**MATH STUDENT EQUITY INITIATIVES REQUIRING FURTHER DISCUSSION (carried over from last spring’s minutes)**

1) **Expanded Math Lab**
   Expand Math Lab services to include MATH 860 students.
   Currently, the Math Lab is housed in the temporary 600 Bungalows. The Math Lab is a highly effective tutoring and computer study lab that focuses primarily on MATH E and MATH 840 students. The lab was expanded using Title III funds back in 2005, but the lab has reached capacity and now is often overcrowded, not to mention understaffed. Officially, MATH 860 students are directed to the LAC for tutoring, yet many 860 students continue to
use the Math Lab. It makes sense that a student working through the 840/860 sequence should be able to get extra help in the same place for both classes. The “jump” to LAC tutoring should take place at the transfer level which students reach after MATH 860. Therefore, we should have a long-term goal of expanding the Math Lab to serve 860 students, and thus serve all pre-collegiate math students in one tutoring location.

The existing Math Lab occupies about 3500 square feet of space. An expanded lab would require at least 4000 square feet.

2) **Algebra Pathway to Statistics**
   Design an alternative precollegiate math sequence that prepares students for transfer-level Statistics.
   This would be an alternative to the traditional MATH 840/860 sequence (which does not contain topics from Statistics) designed for students whose last college math class will be transfer level Statistics. Concerns: Is this a form of tracking? Will students be pigeonholed with certain career options eliminated? A “Stats-trak” needs to be balanced with MESA/STEM initiatives that target students of color.

3) **Intermediate Algebra for Health Science Majors**
   Create a MATH 860-level course that focuses on the mathematical needs of health science majors.
   Think: contextualized Intermediate Algebra with applications to Health Sciences. This course would serve Associate degree students. Concern: would this course be appropriate for RN students who might eventually hope to attain Bachelor’s in Nursing or Master’s in Nursing?

4) **P/NP Grade Option**
   Allow MATH 840 and MATH 860 students to select the P/NP option.
   There needs to be more discussion concerning Pass/No Pass for precollegiate math courses. We will be surveying 840 and 860 students this semester to determine their feelings about the P/NP option.

5) **Peer Mentors**
   Establish a network of peer mentors to assist and advise students in precollegiate math courses.
   The mentors would be CCSF students who had recently been successful in the E/840/860 sequence. Mentors would attend class at least once or twice a week and hold weekly mentoring sessions outside of class. Funding would be required for administration, hiring, and training as well as for lab aide pay for the mentors. The mentors could possibly earn community service credit instead of hourly paid wages.

6) **Condensed MATH E3/MATH 835**
   Develop a new course that combines Basic Math and Pre-algebra.
   Most CCSF basic skills students move directly from Basic Math to Elementary Algebra. Pre-algebra is currently an optional course in the pre-collegiate sequence. This new course
would incorporate pre-algebra skill development into our lowest level basic skills class and thus would give students more algebra preparation without extending the course sequence.

7) **Higher Level Math Bridge for MESA/STEM Majors**
   Establish a Math Bridge Program involving MATH 90 and MATH 95.
   MATH 90 Advanced Algebra and MATH 95 Trigonometry are the gateway courses to the calculus sequence which is required for many STEM majors. Many students find the conceptual leap from 840/860 to 90/95 daunting. Serious efforts to promote STEM to students of color need to involve MATH 90 and MATH 95.

8) **Retention Center Partnerships with Higher Level Math Classes**
   Establish retention center cohorts in MATH 90, 95, and Calculus.
   The mission of the retention centers needs to be expanded beyond basic skills to incorporate the goals of our STEM/MESA Center.

**MATH STUDENT EQUITY AREAS INTRODUCED FOR DISCUSSION AT THE MAY 25, 2010 MATH SUBGROUP MEETING**

1) **Transitional Studies/Credit Math Partnership**
2) **Focus on Geometry for STEM majors at the MESA Center**
3) **Science and Math Faculty Conversations on Student Math Skills**
4) **Math Sequence Comparison with Other Bay Area Community Colleges**
5) **Math at the Non-Ocean Campuses**