SUMMARY OF DISCUSSION

COMMON COURSE ALIGNMENT WORKSHOP

Date: Friday, January 26, 2007
Time: 9:00 a.m. to 3:00 p.m.
Location: Partnership II Building, Room 208
Central Florida Research Park (adjacent to the University of Central Florida)
3100 Technology Parkway
Orlando, FL 32826

Participating Institutions:

Brevard Community College
Central Florida Community College
Daytona Beach Community College
Lake Sumter Community College
Seminole Community College
University of Central Florida
Valencia Community College

MAC 1114: Agreed that the group would interpret the “State Descriptions” to be used in total as 80% of the MAC 1114 course. The group also thought that “Estimation” would be a good topic to be added to the “State Descriptions” and agreed that “Applications” should be emphasized.

Among best practices for MAC 1114 were the following suggestions:

- Libraries (listing) of resources could be established on the web for all to share.
- The use or prohibition of graphing calculators was discussed, with no consensus reached. One suggestion was to pull the batteries of such calculators (to clear the memory) during an examination to keep students from storing formulas. Another suggestion was to give two-part exams: one part in which students may use calculators and the second exam part where calculators are prohibited.
- Embedded questions were recommended as good ways to create standardization among examinations, while continuing to encourage faculty independence in examination creation.
- Common outcomes, common syllabi, and common examinations for all sections of MAC 1114 within an institution were discussed.
- The placement of students into MAC 1114 was a point of discussion with no consensus on criteria.

MAC 1140: The group discussed the end of the course and its role in skills preparation. Many in the group were of the opinion that mathematic induction and algebraic skills were appropriate to be studied in MAC 1140. Some schools conform to the overlap in materials between MAC 1105 and MAC 1140 as directed by the state. Other schools take the opinion that since MAC 1105 is a prerequisite for MAC 1140 that there is no need to duplicate efforts and instead use that time to emphasize later topics and add some topics. Discussants view MAC 1140 as a transitional course and many feel that adding “limits” to the curriculum would help make the transition into MAC 2311 smoother.
MAC 1105: The audiences of MAC 1105 received much attention: 1) for one group of students, MAC 1105 is a preparation course for pre-calculus and 2) for a larger group, the course is the capstone course math for general education. The following were suggested:

- Create a separate course that will meet the needs of majors that now required MAC 1105 for students who have no intention of continuing into calculus;
- Use MGF 1106 or MGF 1107 as possible substitutions for majors who now require MAC 1105 but whose students will not continue in mathematics classes;
- Encourage administration of Departments that currently require MAC 1105 to consider requiring another course such as MGF 1107.
- Many discussants thought that notational skills were important to teach in MAC 1105
- The role of abstract and critical thinking in MAC 1105 was considered
- The graphical content of the course was discussed with opinions of the time spent in class on it ranging from 30% to 70% of the class content
- The problems caused by dual enrollment students and other accelerated learning options were discussed

Some best practice suggestions include:

- Assigning short word paper in class
- Give common final exams in MAC 1105 to achieve some level of normalization
- Have students write out explanations of errors they made in incorrect answers
- Use of Student Personal Response Systems in class
- Use of pod-casting to reinforce textbooks
- Collect one homework problem per class from each student, chosen at random
- Assign an out-of-class end-of-semester project
- Use of online companion systems to textbooks for cumulative assessment.

Unresolved questions include the following:

- Does the State of Florida have an “Applied Algebra” course on the books?
- What majors require MAC 1105?
- Could State of Florida Undergrad Deans discuss the two-audience MAC 1105 issue?
- Could the group inspire some State of Florida action on the MAC 1105 two-audience issue?

Possible follow-up

- Several participants expressed an interest in resurrecting the annual region-wide meeting of math professors. Although no one offered to organize and/or host the meeting, it was hoped that someone would in the near future.
- Everyone was encouraged to continue communicating with each other via Email or telephone as a way of sharing ideas and challenges.
- During any future meeting, it was strongly recommended that a portion of the meeting be set aside to compare best practices, as this was considered a very worthwhile and productive discussion during the Workshop.