IMPAC Annual Report
2004-2005
Science Cluster I: Mathematics
Martin Flashman, Lead Discipline Faculty
Humboldt State University

Summary of Identified Issues
There were two main areas for discussion and recommendations. Each of these areas and many related suggestions were explored at one or both of the regional IMPAC meetings held this year. With the very recent termination of the relation between the CSU and CAN, the only discussion of replacing the CAN system was at the statewide meeting.

I. Course Related Recommendations. Consideration continued from 2003-4 on providing a separate "bridge" or transitional course experience for Mathematics majors prior to transferring. The replacement of the CAN system in the articulation of courses to the CSU was discussed with some resulting recommendations. The CSU Lower Division Transfer Patterns for Mathematics were discussed during the year along with the developing information about local campuses and changing requirements for both liberal studies and teacher preparation.

II. Organizational Recommendations.
At the regional meetings discussion led to this year's recommendations that aim at improving communications at the Colleges and Universities and intersegmental connections.

Identified Trends/Future Directions
Efforts continue at both CSU and UC Mathematics Departments to provide more specific directions for pre-transfer mathematics course work and improving pre-transfer preparation. The coming year should begin to see students using the LDTP and UC major transfer programs to prepare more carefully for transfer. Inter-segmental regional hubs at the UC's and CSU's and cooperation with other organizations to sponsor activities should develop further in the coming year. Other areas worth watching are the CSU's integrated teacher preparation programs and the changing nature of Liberal Studies and preparation of elementary and middle school teachers. The ASSIST web site for exploring majors has much potential while the new IMPAC Mathematics web site is providing an added resource to disseminate information relevant to IMPAC and intersegmental activities.

Comments from Statewide Meetings and the General Field
The use of computers in statistics courses seems to vary considerably but is not adequately identified for articulation purposes. There is continuing concern on providing opportunities for college students to develop more mathematical maturity. The Mini conference on articulation hosted by the Math Department at UC San Diego for regional colleges and universities was considered a very successful new approach to improving communication.

Recommendations for the Discipline
The following recommendations were accepted by consensus among the participants at the mathematics sessions of the statewide IMPAC meetings April 30, 2005.

I. Math Course Related Recommendations
• **CSU and CAN:** It is recommended that the future CSU articulation course numbering adopt as much as possible of the current CAN system numbering. In the development of the future CSU articulation course numbering, community college faculty should be consulted (possibly through IMPAC) in the creation of any new articulation course descriptions.

- **LDTP and UC Major Preparation:** It is recommended that University recommendations for Transfer preparation (LDTP and UC transfer major preparation) be identified and described in catalog and web materials.
- **Bridge Course Recommendations**: It is recommended that efforts be continued to implement prior recommendations from 2003-2004 with regard to Bridge Courses for transferring mathematics majors. **[See the 2003-2004 Report for details.]**

II. Organizational Recommendations
- **The IMPAC Math Web Page**: It is recommended that the IMPAC Math Web Page give access to a reference grid with relevant contact information for the use of faculty (and students) with regard to programs, articulation agreements, and special events.
- **Models for Intersegmental Community Building**: It is recommended that individual universities organize regional intersegmental Mathematics articulation conferences to facilitate the communication of relevant information about requirements and courses among proximate universities and "feeder" colleges and to foster the development of university hubs and greater inter-university cooperation.
- **Math Day(s):** It is recommended that Math Day Programs for community college students be organized with the assistance and sponsorship of such organizations as CMC^3, CMC^3-South and with participation from CSU and UC departments encouraged.
- **Undergraduate Mathematics Conferences**: It is recommended that mathematics conferences, events, and opportunities for undergraduates in California welcome participation for all segments.
- **Prior Recommendations**: It is recommended that efforts be continued to implement prior recommendations from 2003-2004 with regard to Transfer Coordinators, Transfer Web Pages, and Course Information. **[See the 2003-2004 Report for details.]**
- **Coordinating Committee**: It is recommended that the 2005-2006 IMPAC Math sessions consider the establishment of a Statewide IMPAC Math Coordinating Committee to help facilitate statewide and regional intersegmental mathematics activities.
- **Future Meetings:** It is recommended that Mathematics continue to meet both at regional and statewide IMPAC meeting in 2005-2006.

Topics for Further Discussion
Review of programs and courses for teachers at all levels is a subject for future discussion.. The treatment of courses taught remotely-with computers on-line or by telecommunications does not seem to be standardized.

Recommendations Forwarded/ to be forwarded to ASSIST:
- It is recommended that the ASSIST web resource on majors be designed further to give easier and more direct access to university Mathematics Department web resources.
- It is recommended that ASSIST explore the possibility of incorporating existing CAN numbers and descriptors into the ASSIST data base.

Outreach presentation made by members of this group:

Organization	Date/ Place	Presenter	Number Present
CMC^3 South	November 15, 2004	Martin Flashman	25