Mathematics Department Response to the Program Review

April 2008

General:

The Program Review for the Department of Mathematics was completed in March 2008, after a visit by the Review Team, which consisted of Dr. Peter Alfeld (Professor, Department of Mathematics, University of Utah), Dr. Robert Heal (Professor, Department of Mathematics and Statistics, Utah State University), Dr. Sue Harley (Professor, Department of Botany, Weber State University), and Dr. Eric Swedin (Associate Professor, Department of Information Systems and Technologies, Weber State University). The program faculty members feel the report is fair and well thought out.

Response to recommendations:

In section 3 it is stated that "...the review team recommends that the Department place high priority on the recruitment of additional mathematics teaching majors" and "It should be possible for Department faculty to develop recruitment brochures, visit high school classrooms (giving talks when possible), and prepare web-based materials that can be distributed to graduating high school seniors."

This is valuable advice. We've had a brochure in the past and will work to create a new one. We will place a high priority on recruiting majors, especially Mathematics Teaching majors, starting immediately.

In section 4 it is recommended that "the faculty should be encouraged to provide greater participation in the local MAA chapter."

We agree with this. One of our recent retirees (Dr. Lee Badger) was chair of the Intermountain Section of the Mathematical Association of America (MAA), and the current Mathematics Department Chair has been functioning as web master. An effort will be made to increase participation of not only faculty, but students.

In section 6 it is recommended that "Funds should be provided to offer grading services to faculty."

We do have some budget dedicated to this, but we will work with the administration to get more. Our goal will be to have a grader available for every course calculus and below (if desired by the faculty).

Also in section 6, it is recommended that "Students should be able to review course evaluations, including student comments, of faculty from whom they consider taking classes."

The university had some evaluation questions a few years ago that were available to students. We will consider this if we can get the comments typed out, and if faculty and the administration agree.

Also from 6: "Consideration might be given to differentiating those loads in both directions to support scholarly activity, program development, independent study, research experiences by students, or perhaps a Math Club."

This has been done to a small extent. We will do this as best we can, given our budget. Our goal is to be fair in assigning work loads.

In section 7: "Many of the Math faculty, from senior faculty to recent hires, expressed a desire to be physically closer to their colleagues in the other departments in the College of Science."

We fully support the construction of Science Building 2, which means we could move up to be with our colleagues. The review also states, and we concur, that "The College of Science and the WSU central administration should seriously consider the needs of the Mathematics Department when planning for construction of the next new building."

Also from 7: "Many of the Math classrooms (including rooms that the department might acquire in Building 3) need to be equipped with PCs with appropriate software and web access, ceiling mounted digital projectors, and digital visual presenters ("Elmo" units). Some of the chalkboards should be replaced with white boards, when appropriate."

We are in process of trying to get this type of equipment for our classrooms. We will work with the administration to succeed in this effort.

From section 8: "It is important that the Mathematics Department remain engaged in current and future operation of the program by reviewing curriculum materials, examinations, standards, and other aspects of developmental math that impact the mathematics program."

We plan to do all that is stated. We plan to fully cooperate with the Developmental Mathematics Program and help with assessment as needed. The full scope of what we do will depend on the Director of Developmental Mathematics (in process of being hired) and the Dean.

Also from 8: "We recommend that the status of all DM teachers and their pay should be fair and adequate."

We agree, and will pass this along to the administration and the Director of Developmental Mathematics.

From section 9: "The Department's web site is out of date and does not match the level of design and quality of other departments in the College of Science. A major redesign effort is necessary. A few suggestions: the WSU-Math website could include recruitment material for potential students, scholarship information, course syllabi, links to current online course material, employment information, examples of student course schedules with a graph indicating

course prerequisites, a schedule of events, links to nationally recognized essays on mathematics, links for math-ed majors."

We agree and work on our web site has already commenced. With the university going in a new direction for web pages, we will conform to their standards and take the suggestions above for our site. We have had volunteers offering to help already.

Also from 9: "The Department operating budget needs to be increased in order to support the outreach effort to recruit new students, to provide graders for faculty, to create a distinct peer tutoring service to students enrolled in courses at the 2000 level and above, to redesign the Department web site, and to obtain additional computing and technology resources for the classrooms."

We agree and will work with the administration and ask their help.

We conclude with the last sentence in section 10, which we agree with and were happy to see. "Given continued faculty commitment and financial support by the College of Science and WSU administration for research and scholarly activity, and with significantly improved facilities and equipment in the near future, the Department has enormous potential to achieve even greater success in its mission to integrate mathematics into the personal and professional lives of students."

We will work hard to achieve this potential.

Future Directions beyond the review:

- Hire new faculty as needed.
- Build research groups as the opportunity arises.
- Provide faculty with the support they need to be professionally active by providing more released time and reassigned time for research and/or teaching projects.
- Modify the curriculum as needed to best meet the needs of our students in ways suggested by both national trends and our own research.
- Increase salaries to maintain a productive faculty and to attract talented newcomers.
- Reduce our reliance on adjuncts.
- Improve facilities, which include the following items:
- Increase resources for items such as travel, library holdings, journal subscriptions, recruitment and advisement.
- Work with local school districts to improve the mathematical preparation of incoming students.
- Design and offer classes that integrate curriculum from other related fields with mathematics.