# Mathematics Department Response to the External Visiting Program Review 2017-2018 Team Report May 3, 2018

The External Visiting Review Team spent one and a half days on campus, Feb. 20 and 21, 2018. We appreciate the effort and time to complete a through review. They rated us strong in most areas.

## STANDARD A - MISSION STATEMENT

The Team found the department Mission Statement to be a strength. The department will periodically update it.

## STANDARD B – CURRICULUM

The Team found that curriculum and program maintenance was good and the result of careful planning.

Currently curriculum and programs are maintained by senior and/or key faculty via departmental committees. There is the curriculum Committee (program and courses for majors), the Math Education Committee, the Calculus Committee, and the QL Committee (includes courses below calculus). The process is centered in the committees with coordination by committee chairs with discussion and approval during department meetings. Changes originate in different ways. Changes in QL courses are the result of coordination with USHE and other state universities to ensure that the content and goals are quite similar. Changes to Math Education courses are the result of USHE and USBOE requirements for licensure and math endorsements. They are also the result of efforts to improve student's conceptual understanding. Course and program changes are the result of faculty attending professional conferences. They are also the result of discussions with a Department Advisor Board.

The curriculum was found to be consistent with learning outcomes and a strength.

The Team determined that resources were inadequate. The department agrees. Faculty are spread thin trying to train, maintain, and mentor adjuncts and teachers in concurrent enrollment courses. There is just not enough faculty to make real progress on improvements. It is a major endeavor to coordinate and collect data for learning outcomes and initiate GELOS with in all the courses taught by adjuncts and concurrent enrollment teachers. There is just not enough time for faculty to engage in PD and scholarship. There is also very small travel budget for such a large department.

Scheduling of courses was found to be a strong. The department tries its best to schedule enough calculus courses and certain key UD courses, yet waitlists are occasionally large or conflict with other courses. We endeavor to coordinate service courses at times that do not conflict with key courses in other majors. Efforts are also made to schedule upper division math courses so that math majors can enroll in any math course they need. This results in delayed graduation for a few students.

The department has continually requested more faculty and staff but is told that there is just not enough money while the number of administrative staff has continued to increase.

## STANDARD C - STUDENT LEARNING OUTCOMES AND ASSESSMENT

The Team rated learning outcomes and outcome assessments as a strength. They said that they were well crafted and implemented.

Department faculty appreciate the rating. We only add that implementation of learning outcomes and assessment took a lot of time and effort. Direct measures assessment continues to take an enormous amount of time in writing questions, in data collection, and in data compilation. We also feel that math is so concrete, structured, and objective that scores on exams **are** a direct measure of learning outcomes.

### STANDARD D - ACADEMIC ADVISING

Academic advising was rated as strong. Comments were that our faculty mentor system was well implemented and a department strength. Students know the requirements and where to go for advising help.

### STANDARD E - FACULTY

Ratings in the Faculty area were mixed. Insufficient faculty size was found to be a weakness for both major programs and for professional development and for teaching improvements. Core faculty qualifications and diversity were rated Good and Strong respectively, but adjunct faculty qualifications were rated as weak. Orientation/mentoring and evaluation of core faculty was strong.

The department concurs with these ratings. The size of the core faculty makes it quit difficult to accomplish the oversight and evaluation that should be done. We just do not have time to monitor and review adjunct faculty, some review is not done until a problem arises. There is little time to make real progress on instructional improvements. More classroom visitation in courses taught by adjuncts will be almost impossible without additional core faculty.

We have made yearly requests for more full time faculty, but the response is that there is no money for it or that the legislature has not provided any funds for it.

# STANDARD F - PROGRAM SUPPORT

Overall program support received a good rating.

The department believes we are lucky to have such a motivated and hardworking administrative assistant. But the workload/ administrative tasks are stretching us to the limit of what we can do. There are an increasing number of meetings/events and requests for us to attend. There are an increasing number of requests to offer instructional workshops and offer PD courses for public school teachers and concurrent enrollment teachers. Increasing number of requests for us to participate in PR and outreach events.

# STANDARD G - RELATIONSHIPS WITH EXTERNAL COMMUNITIES

Relationships with external communities was rated as strong.

The department believes we have good relationships with certain external communities. We work extensively with public schools, state offices of education, and the regional MAA. Concurrent enrollment has been mandated with only modest additional support. It has become an overwhelming chore to maintain the quality and academic integrity of courses sufficient for students to be successful in upper level STEM programs.

We have a very modest relationship with local government and business. We also have an advisory board. Both are in the process of improvement. But progress is slow due to limited time and faculty.

# STANDARD H - PROGRAM SUMMARY

Yes, we have made excellent progress in advising majors and mentoring new faculty and little progress in oversight of adjunct faculty.

Apparently the review team did not have access to our revised mission statement and the extensive revision of our strategic plan.

In the area of grants, we disagree. One faculty received and has been working for the past three years on a grant from state offices of education to improve public school math instruction (8X8 project). We anticipate its continuation. We are offering concurrent enrollment math courses with assistance from WSU administration and USHE grant funding.

We have made excellent progress on common finals for Calculus I and II. We are considering common finals for College Algebra.

We will discuss how to implement course coordinators/led instructors for multiple section courses.

# Specific Review Team 2018 Recommendations

- 1. Department Mission Statement and Strategic Plan were completely revised during the past three years.
- 2. Hiring more faculty is not up to the department. We believe increasing enrollments justify it and in addition to an increasing number of initiatives centered about math. These include an engineering calculus sequence request form EAST, QL taskforce initiative from the provost's office, concurrent math enrollment mandated by the Utah state congress, alternate placement testing ALEKS, workshops for students to renew prerequisites, and presentations to help students change to a growth mindset.
- 3. There is an additional staff person whose job it is to coordinate Concurrent Math Courses. The position is funded by grant money. Continuation is uncertain.
- 4. Additional classrooms may become available when centralized scheduling is implemented.
- 5. Course coordinators will be discussed.

To summarize, we will continue to follow through on the recommendations as best we can. Our overarching need is more faculty to address the needs in all the areas we serve, general education courses, service courses for STEM majors, courses for majors, pre and in service courses for teachers, community relations and training with the public schools, recruitment and retention of majors, and the formation of relations with the local employers in government and industry.