
Math Resource Center

Cycles included in report:
Cycle #3 8/1/14 to 7/31/15

Program Name: Math Resource Center
Program Cycle: #3 8/1/14 to 7/31/15

1 Summary Information Summary of Data

The Math Resource Center (MRC) offers free services to any student currently enrolled in a JCCC Math course. Services provided for students include: walk-in tutoring, group study rooms, quiet study room, instructional videos (DVD and streaming), instructional handouts for calculators and software, textbooks, solutions manuals, calculators to borrow or rent, and a computer lab. In addition, the MRC provides the following services to the faculty of the math division: check out classroom sets of calculators, provide handouts such as formula sheets and tables, reserve computer lab for class projects, reserve study rooms for review sessions, facilitate mastery testing, provide lists of instructor and student resources for each course and textbook, keep professor reserve items for students to check out, and keep and distribute updated final exam reviews. Many professors also hold their office hours in the MRC since that is where their students are. These services were provided at a cost of only \$2.70 per student hour of use in AY2013 based on expenditures reported in the IR report attached and MRC student login data.

As can be seen from the data provided by IR, students who attend the MRC have a higher pass rate than those who do not attend the MRC in 19 of the 22 courses included in the report. This is the first time we have seen this data and it gives us an opportunity to learn more about what is happening with students in the remaining 3 courses so that we can better serve their needs. Additional analysis of the data shows that during the 3 year cycle 65.7% of MRC users passed their course with an 'A', 'B', or 'C', compared to 64.1% of non-users. Year by year, the MRC users pass rate compared to non-users was 64.5% compared to 63.1% in 2012, 67.3% compared to 62.9% in 2013, and 65.6% compared to 66.3% in 2014. Between the 2013 and 2014 years, approximately half of the tutors transferred to schools out of the area which may explain the slightly lower percentage for 2014 since there were so many new and less experienced tutors. Although the pass rate of students who use the MRC is only marginally higher than those students who do not, the students who do use the MRC do so because they are struggling in class or realize that they are likely to struggle in the future. Thus it is reasonable to assume the MRC serves a population that would have a much lower pass rate if the MRC were not available.

The MRC tracks several statistics regarding student usage: number of individual students who visit each semester, number of visits each semester, average time per visit, average hours per students, total hours of use, and average number of visits per student. Student usage of the MRC continues to be wide spread with more than half of the math students enrolled at the main campus visiting each semester. The average length of visit remained steadily higher during AY2012-AY2014 than the previous years and is sharply up for the Fall 2014 semester. The average number of visits per student has been steady over the 2012-2014 academic years and remains steady in Fall 2014. The average number of hours per student per semester over the review period is substantially higher than the years preceding, and the trend appears to be continuing in Fall 2014. Although the number of students, visits, and hours of use have declined over the past three years, more than half of the math students enrolled at the main campus continue to use the MRC each semester. In addition, the Spring 2015 hours of use is on pace to set a record due to students continuing to stay substantially longer per each visit than over the previous three years. These declines may be due to college wide declines in enrollment or the increase in online courses and online homework systems. The MRC began an online tutoring service and expanded its D2L website to reach out to online students as well as students taking classes at campuses other than the main campus. Each semester since it began in Spring 2014, the online tutoring service has almost doubled the number of "visits", number of student users, and number of hours of use. The MRC D2L website now has access to all streaming videos in the MRC library as well as many of the notes and handouts that we have in the MRC. There are currently 605 registered users. Students access the online tutoring service through D2L as well. In AY2015, the MRC will begin reaching out to the growing number of students enrolled in College Now and Quick Step Plus classes offered through the JCCC Math Division. In addition, the MRC has begun a partnership with the Veterans' Resource Center to help serve their constituency.

The MRC has three group study rooms that can be reserved by students or faculty. Students may reserve a room if they have a group of three or more and reservations can be made on a one time or recurring basis. The computer lab can be reserved by faculty to bring their classes in to work on

projects, online homework, or online testing. Approximately 100 reservations were made each year for the computer lab during the review period, and approximately 1100 group study room reservations were made each year during the review period with at least 79% of the reservations being made by student groups.

HandbookProgramReviewFall2014 [PDF 2,136 KB 9/8/14]

Math Resource Center [PDF 525 KB 9/8/14]

MRC Program Summary v2 [DOCX 175 KB 11/20/14]

MRC Room Reservations AY2012-AY2014 [XLSX 10 KB 11/21/14]

MRC Usage AY2012-AY2014 [DOCX 14 KB 11/20/14]

Student Success in MRC Academic Years 2012 to 2014 [XLSX 20 KB 11/21/14]

2 Achieve/Promote Student Success

2.1 Additional Programming Additional & Pilot Programs

Supplemental Instruction - Embedded Tutor (SIET): MRC tutors are assigned to certain classes and act as model students as well as assisting students during class. The tutor also holds two sessions each week outside of class to develop good study habits for the students including note-taking, using the textbook effectively, and most importantly how to form and work with a study group. Tutors encourage the students to work together, discuss different approaches to problems, consider the pros and cons of the different approaches, and settle on a solution. In the fall semester of 2012, SIET was piloted embedding an MRC tutor with 5 sections of College Algebra. 5 tutors were matched with 5 professors who taught at least two sections College Algebra. The SIET tutor only worked with one class for each professor, with the non-SIET classes acting as a control group. After the semester ended, it was determined that a better model might be to focus on Intermediate Algebra so the tutors could help build the skills necessary to successfully complete College Algebra in the prerequisite course. In the Spring 2013 semester, 4 Intermediate Algebra and 1 College Algebra course had SIET tutors. During the Fall 2013 semester, tutors were embedded with 4 Intermediate Algebra and 1 College Algebra courses again. During Spring 2014 semester, SIET tutors worked with 3 Intermediate Algebra, 1 College Algebra, and 1 Statistics course. SIET was temporarily put on hold for the Fall 2014 semester. However, during the fourth week of class, a SIET tutor was requested for a Veterans' Focus combination Elementary/Intermediate Algebra course. That course was matched with a SIET tutor and is experiencing very good participation from the students. SIET will be expanded during the Spring 2015 semester to serve 3 Veterans' Focus sections (one each of Elementary, Intermediate, and College Algebra), 2 Statistics sections, and 2 traditional College Algebra sections.

Online Tutoring - in the Spring semester of 2014, the MRC piloted an online tutoring service run in-house. The initial pilot focused on students enrolled in Math 231 (Business and Applied Calculus 1). Although faculty informed their students about the service, only two students took advantage of it during the first 7 weeks of the semester. The online tutoring service was then opened up to all Calculus students (Math 231, 232, 241, 242, and 243) and all online students regardless of course. We ended the semester having served 7 individual students for approximately 20 visits, data on total hours of usage was not collected. The students were enrolled in Math 231 (Business and Applied Calculus 1), Math 241 (Calculus 1), and Math 243 (Calculus 3). For the summer semester, the program remained open to all students enrolled in an online math class and all students enrolled in Calculus courses. After low usage during the first 3 weeks, online tutoring was opened to all JCCC math students. The summer usage data show that we served 4 individual students, approximately 20 times, for a total of approximately 11 hours of usage. Students who used the service were enrolled in Math 181 (statistics self-paced/online), Math 242 (Calculus 2 f2f), and Math 171 (College Algebra f2f). During the spring and summer pilot, the online tutoring service was only open 6 scheduled hours per week. For the Fall 2014 semester, online tutoring is available to all JCCC math students all 74 hours per week that the MRC is open. In Fall 2014, 13 students used the service for a total of approximately 27 hours over 34 visits. So far, in Spring 2015, 17 students have accessed online tutoring for 53 visits and 41 hours of service. We expect the numbers to grow as we approach final exams. The MRC has sent direction on how to access online tutoring to all online instructors who have posted them on their D2L websites as well as putting them in their syllabi. We are working with our online curriculum vendors to see if their is a way to include a link to the service within their online homework platforms.

Tutor Seminars - Math 120 (Business Math) is a course that very few tutors have taken during their formal education. The methods and vocabulary of Math 120 are opaque to anyone who has not been through it. With that in mind, the MRC offers a weekly seminar for the tutors which teaches them the content of Math 120 a week ahead of where the classes are, so that they can effectively help the Math 120 students. All new tutors are encouraged to attend the weekly seminar and it is not uncommon for more experienced tutors to attend to brush up on their skills. It has recently come to our attention that Statistics (Math 181 and 285) has a similar situation. The MRC will be piloting a weekly Statistics seminar for tutors in the spring of 2015. There is a plan to add a Calculus 2 (Math 242) seminar for the Fall 2015 semester. Calculus 2 is a gateway course to upper level mathematics courses.

2.2 Measures/Assessments Assessments

SIET student survey - Results from the Fall 2012 and Spring 2013 SIET student surveys are summarized below. Results from the Spring 2014 SIET student survey are not yet available. In Fall 2012, 50.7% of students enrolled in SIET classes attended the extra SIET sessions which focus on note-taking skills, problem solving strategies, and how to form and work in peer groups outside of class. 40.3% attended 3 or more of the sessions. In Spring 2013 73.5% attended at least 1 SIET session and 49.4% attended 3 or more sessions. 79.1% of the Fall students and 89.2% of the Spring students strongly or somewhat agreed with the statement that "the tutor embedded was a benefit". 49.3% (Fall) and 74.7% (Spring) of students strongly or somewhat agreed with the statement that "SIET sessions were helpful". 77.8% (Fall) and 75.8% (Spring) strongly or somewhat agreed with the statement that "I learned some new strategies for learning math in SIET". 65% (Fall) and 68% (Spring) strongly or somewhat agreed "I wish I had taken more advantage of SIET".

Due to low student usage in the Fall 2012 SIET sessions, the Spring Student Survey asked students to respond to the statement "I chose this section because of the embedded tutor." Only 36.6% of student responses strongly agreed or somewhat agreed with this statement. That led us to believe that students did not realize that they were enrolling in a SIET class and therefore a change in advertising was warranted. New advertising methods were initiated in Fall 2014 for the Spring 2015 enrollment period. SIET classes were identified before enrollment began and advertisements on the hall monitors ran throughout the enrollment period. In addition, the MRC will be using a bulletin board in the MRC to highlight the different course formats that the Math Division offers including SIET. These efforts are to try to get students who would benefit from SIET to enroll in SIET courses. However, scheduling issues and the fact the taking advantage of the SIET session is optional are challenges that we are still working to overcome.

Online Tutoring student survey - a section of the Summer 2014 MRC Student Survey asked about the experience students had with the MRC's online tutoring system. However, although the responses were positive, the data is unreliable as there were far more responses than students who actually used the service.

siet survey spring 2013 [PDF 208 KB 11/17/14]

2.3 Accomplishments

Technology Innovation Grant - The MRC was award a Technology Innovation Grant (TIG) to buy a Wacom tablet to use with the online tutoring program in the Fall 2013 semester.

Innovation of the Year Award - The League for Innovation in the Community College awarded the Supplemental Instruction Embedded Tutor (SIET) an Innovation of the Year Award in 2013 for Basic Skills and Developmental Education. Awarded to Libby Corrison (past director of MRC) and Kathryn Byrne (director of Writing Center). MRC tutors who participated include: Zach Ayres, Aaron Bretton, Jeff Lewis, Carol Shepard, Josh Smith, and Thomas Parra.

Business Math - as a result of the Business Math seminar for tutors, more than half of the tutors can confidently help students in Business Math.

A \$100 gift was given to the MRC by a student in appreciation of a retiring adjunct Business Math professor.

Presentation at the KC Regional Math Technology Expo about the online tutoring pilot program.

The MRC has received visits from representatives of the following institutions to learn about how the MRC is structured and operates during AY2014:

Allen County Community College
 Sukkur IBA (Pakistan)
 Western Iowa Technical Community College
 Metropolitan Community College of Omaha
 University of Kansas

3 Assessment of Student Learning Outcomes

Not Applicable as the MRC offers no classes

Assessment&CurriculumChart [XLS 41 KB 9/8/14]

4 Significant Assessment Findings

Not Applicable as the MRC offers no classes

5 Ongoing Assessment Plans

Not Applicable as the MRC offers no classes

6 Student Evaluation/Survey Responses Survey Results

During the second half of the Fall 2013 semester, f2f JCCC math faculty were asked to volunteer to give a survey about the MRC in class to gather information from both MRC users and non-users. 246 surveys were completed and returned from 15 difference courses (Math 099, 115, 116, 120, 130, 171, 172, 173, 181, 231, 241, 242, 243, 254, and 285). Of the 246 respondents their usage of the MRC for Fall 2013 follows:

64 visited 0 times
 52 visited 1 times
 38 visited 2 times
 19 visited 3 times
 9 visited 4 times
 64 visited 5 or more times

Of MRC users:

93% said they were "satisfied" or "very satisfied" with their overall experience with the MRC;
 84% said they were "satisfied" or "very satisfied" with tutor content knowledge;
 80% said they were "satisfied" or "very satisfied" with tutors' abilities to communicate clearly;
 85% said they were "satisfied" or "very satisfied" with tutors' willingness to help;
 81% said they were "satisfied" or "very satisfied" with tutors' knowledge of MRC resources.

Of 116 students had been to the MRC 0 or 1 times in Fall 2013:

52.6% indicated it was because they were doing fine in class and did not need assistance
 32.8% indicated it was due their their home/work/class schedule
 7.8% indicated "other" (the most common comment was they had assistance at home)
 2.6% indicated that they had a bad experience in the MRC in the past
 1.7% indicated that they did not know about the MRC
 1.7% indicated that they did not think the tutors would be able to help

59% of respondents indicated that they would use an online tutoring service if the MRC offered one.

During the sixth week of the Summer 2014 semester, a survey was distributed to student users of the MRC when the logged in. During 3 days, 59 surveys were collected. The students had the following

distribution of MRC visits for the summer semester:

1 student visited 0 times
1 student visited 1 time
2 students visited 2 times
1 student visited 3 time
5 students visited 4 times
49 students visited 5 or more times.

Of the 58 students who had previously visited the MRC:

98.3% of the students indicated that they were "satisfied" or "very satisfied" with the overall service they received

100% were "satisfied" or "very satisfied" with the tutors' mathematical content knowledge

98.3% were "satisfied" or "very satisfied" with the tutors' knowledge of our resources

96.6% were "satisfied" or "very satisfied" with the tutors' abilities to communicate clearly

100% were "satisfied" or "very satisfied" with the tutors' willingness to help.

No data from previous MRC student satisfaction surveys have been found.

SIET survey results: Fall 2012, Spring 2013, and Spring 2014 survey results are summarized in section 2.2 of this document.

Math Resource Center Student Survey [DOCX 23 KB 11/14/14]

6.1 Highlight Accomplishments Accomplishments

SIET continues - The students' positive responses and comments on student survey's as well as verbal comments let us know that the students value the program. One student told his professor after the final exam that although he never attended any SIET sessions, he appreciated that JCCC cared enough about the students to offer a program like SIET.

Online tutoring piloted - based on the Fall 2013 student surveys, 59% of respondents indicated they would "very likely" or "somewhat likely" to use an online tutoring service if the MRC provided one and 24% respondents indicated that they were "unsure" whether or not they would use an MRC online tutoring service, while only 17% indicated that they were "somewhat unlikely" or "very unlikely" to use an MRC online tutoring service. Based on these results, the MRC piloted an online tutoring service in the Spring and Summer semesters of 2014.

Only 1 Business Math student from the Fall 2013 survey did not use the MRC because they thought nobody would be able to help them. However, more Statistics students said they did not use the MRC because they thought nobody would be able to help them. We are instituting a Statistics seminar to train tutors who have not taken statistics or need to review their statistics so that more tutors can help Statistics students beginning in Spring 2015. A similar program for Math 242 (Calculus 2) is planned for Fall 2015.

Senior Tutors - A new rank of tutor was developed in 2014 and implemented during the Fall 2014 semester. These new senior tutors will mentor new tutors, participate in the various outreach programs the MRC and Math Division have, participate in annual professional development, and tutor the upper level courses. Senior tutors must have at least one year of tutoring or teaching experience and must have taken at least 21 credit hours of mathematics courses Calculus 1 and above.

7 Curriculum Reflection

Not Applicable as the MRC offers no classes

8 Resource Center Successes

A successful math resource center will improve student passing rates and student satisfaction with the institution. A well-trained and experienced staff is essential to achieve those goals. As was seen in sections 1 and 6, data show the MRC has achieved such success. This section will address, in part, how we achieved that success and who is recognizing.

Staff retention rates: 51% of staff members at the end of AY 2014 were on staff at the beginning of AY 2012. This is in large part due to two things: 1) tutors who are JCCC students who then transfer to KU prefer working in the MRC to KU's KAP and 2) after graduating, several tutors enjoy working in the MRC so much that they continue working evenings and weekends even after obtaining full-time employment.

All Tutor In-service - The MRC organizes and hosts an annual in-service session for tutors from across campus. Representatives from the Administration, Counseling, Learner Engagement & Success, Student Services, Access Services, and Learning strategies as well as the directors of the various resource centers talk to the tutors about opportunities and services that are available to the students with whom they may be working. Tutors from The Math Resource Center, Writing Center, Language Resource Center, Science Resource Center, Access Services, and Accounting attend this workshop.

The MRC has received visits from representatives of the following institutions to learn about how the MRC is structured and operates during AY2014:

Allen County Community College
 Sukkur IBA (Pakistan)
 Western Iowa Technical Community College
 Metropolitan Community College of Omaha
 University of Kansas

The MRC successfully transitioned to a new director after Libby Corrision retired.

Students who use the MRC are more likely to pass their mathematics course with an 'A', 'B', or 'C' than those students who do not use the MRC.

SIET was piloted, successful, and won the Innovation of the Year award in Basic Skills and Developmental Education from the League of Innovation in the Community College.

Online tutoring program was piloted and successful for the students who used it.

8.1 Highlight Faculty/Tutor Accomplishments

JCCC Service Pins Summer 2011 - Spring 2014
 Amy Lemer (assistant supervisor) - 5 years Fall 2011
 Andy Pettyjohn (tutor) - 10 years Spring 2014
 Bob Davidson (tutor) - 15 years Fall 2011
 Brian Terry (senior tutor) - 5 years Fall 2012
 Caroline Goodman (former assistant supervisor and interim director, now FT Assoc. Prof.) - 5 years Fall 2013
 Jeff Lewis (tutor) - 5 years Fall 2012
 Kirke Larson (tutor and assistant supervisor) - 5 years Fall 2012
 Michael Terry (senior tutor) - 10 years Spring 2012
 Ray Dennis (senior tutor) - 5 years Fall 2012
 Sally Brown (administrative assistant) - 20 years Fall 2012
 Thomas Parra (senior tutor) - 5 years Fall 2011
 Wei-Fan Yu (tutor) - 5 years Fall 2013

Awards:

Dave Stephens (tutor)- team took 2nd Place at the Kansas Collegiate Mathematics Competition in March, 2014.

Sally Ann Brown (administrative assistant) received the Bob Frizzel Award in Spring 2014 for her "extraordinary commitment to serving students, employees, and visitors to the campus"

Amy Lemer (assistant supervisor) nominated for Lieberman Teaching Excellence Award for Adjunct Faculty

Caroline Goodman (interim director 2011) won the Rookie of the Year Award for 2011-2012 for

outstanding work in her first year as a full-time faculty member

Libby Corrison (past director) was on a team that won the first Excellence in Outcomes Assessment Award for team effort in the area of assessment

AMATYC (American Mathematical Association of Two Year Colleges) Student Math League 2 Round Annual Contest

Brian Terry - Round 2 JCCC First Place - Spring 2013

Jarred Mosher - Composite JCCC First Place - 2012-2013 and 11th Place Overall in Central Region

Brian Terry - Round 1 JCCC First Place - Fall 2013 and Third Place JCCC Composite 2013-2014

Raki Prasad - Composite JCCC Fourth Place - 2013-2014

Libby Corrison (past director) was granted Professor Emeritus status upon retirement in 2013.

Brett Cooper (director) is embedded with ITMD 271 Budgeting and Estimating in Interior Design under a Perkins Grant to help improve the effectiveness of the mathematics instruction in this non-mathematics course.

Brett Cooper participated in a grant from the US State Department to assist Sukkur IBA, a Pakistani business university, in setting up the first community college system in Pakistan.

Committees

Placement and Assessment Committee (Mathematics) - Libby Corrison 2011-2013, Brett Cooper 2013-2014

Developmental Education Committee (College-wide) - Libby Corrison 2011-2013, Brett Cooper 2013-2014

Presentations:

Brett Cooper (director) presented results of the online tutoring pilot program at the 2014 Kansas City Regional Mathematics Technology Expo

Lisa Erickson (assistant supervisor) presented on several topics at the Kansas City Regional Mathematics Technology Expo in 2011, 2013, and 2014.

Libby Corrison (past director) presented on using Camtasia Kansas City Regional Mathematics Technology Expo in 2012 as well as being on the coordinating committee for the Expo.

Other:

Carol Shepard (tutor) married Ray Dennis (tutor)

8.2 Innovative Research, Teaching or Community Service

Multiple staff members of the MRC have given presentations at the Kansas City Regional Math Technology Expo. See section 8.1 of this review for a listing of presentations. Moving forward, it is the intent of the Director of the MRC to study the effects of the new programs outlined in this report on student success and staff development and share those findings with the JCCC, mathematics, and teaching communities at large.

Since the MRC offers no classes and is open only to students currently enrolled in JCCC Math classes, innovation in teaching and community service is not applicable.

9 Goal Setting and Action Plan

9.1 Long-term Goals Long Term

- 1) Increase usage of online tutoring service through advertising, demonstrations, reaching out to College Now and Quick Step Plus students to 100 hours per week which will require dedicated tutors by May 2019.
- 2) Expand SIET through targeting specific student populations to 10 classes per semester averaging 10 students participating per week by May 2017.
- 3) Offer programmed events in conjunction with internal and external organizations such as workshops, guest speakers, and recruiting events for transfer institutions by August 2018.

General Outcomes Links

Key Performance Indicators Campus-wide KPIs

Full-time Graduate and Transfer	Full-time Graduate and Transfer (3-year cohort)
3 - Persistence	Persistence Fall-to-Fall (Measured by Noel-Levitz Student Satisfaction Inventory) on the following indicators: Instructional Effectiveness Registration
4 - Student Satisfaction	Effectiveness Concern for Individual Academic Advising/Counseling Safety and Security

9.1.1 Long-range Adjustment to Resources Resource Adjustments

More In-service time - As online tutoring grows and more professors use specialized software and online homework, tutors will need to be trained in the different systems. This is estimated to be an additional 40 hours of work per year.

Dedicated computer, space, and tutor for online tutoring. Having a dedicated tutor would require scheduling an addition 3108 hours of work per year.

Increased funding to cover SIET staffing and training while still providing adequate staffing to the MRC. Increasing to 10 sections will require an additional 960 hours of work per year.

9.1.2 Updates on Long-Term Goals

Not applicable as this is the first cycle.

9.2 Short-Term Goals Short Term

- 1) Increase average SIET student participation to 7 students per class per week by December 2015 through better advertising and targeting special student populations.
- 2) Increase the hours of usage of online tutoring to at least 50 hours per semester by May 2016 through demonstrations, advertising, and outreach efforts to meet the needs of off-campus students.
- 3) Provide support for statistical software packages for Math 181 and Math 285 students through targeted in-service training sessions for tutors and supervisors by August 2015.
- 4) Put into place a formal training/mentoring system for new tutors during their first 3 weeks of work so they can more quickly learn best practices and procedures in the MRC to better support student success by August 2015.
- 5) Institute a certification program to ensure quality control of services provided by tutors in Math 120, 181, and 285 in Spring 2015, Math 172, 173, 242 in Fall 2015, and Math 165, 175, 243, 246, and 254 in Spring 2016.

General Outcomes Links

Key Performance Indicators Campus-wide KPIs

- | | |
|--------------------------|--|
| 3 - Persistence | Persistence Fall-to-Fall
(Measured by Noel-Levitz Student Satisfaction Inventory) on the following indicators: Instructional Effectiveness Registration |
| 4 - Student Satisfaction | Effectiveness Concern for Individual Academic Advising/Counseling
Safety and Security |

9.2.1 Actions/Resources Required

1) Start planning for SIET earlier to get advertising out before enrollment begins. Discuss SIET with other departments and service providers to find student populations groups that would benefit from the program.

5) More tutor in-service time to discuss the certification program with the tutors.

5) Time to learn how to use Scientific Notebook to write and generate certification exams

2) Find appropriate support to aid in more effective advertising of MRC services

4 & 5) Time set aside for development of new training and in-service programs, as well as development of the certification program

1-5) Add Full-time Asst. Director position - The MRC currently has 9 assistant supervisors, 7 of whom have regular shifts to oversee the MRC during the 34 hours per week that the MRC is open and the director is off campus. Recruiting qualified applicants when an opening occurs and efficiently training a new hire once one is selected is difficult when so few hours are available (3-4 hours per week). Having so many assistant supervisors makes it difficult to maintain consistency in the application of MRC policies and procedures as well as maintaining efficient communication. In addition, developing and maintaining the new programs described in the short-term and long-term goals sections will require time and support that was not previously required. It is therefore recommended that the several PTT assistant supervisor positions be consolidated into one FT assistant director position which would take on additional responsibilities such as those described in this document. If a FT position is not feasible, a PTR position would at least provide more consistency than we currently have.

Increase the number of computers in the computer lab to 31 in order to accommodate classes of more than 24 students. In addition, as more professors use online homework systems, more students come in individually to use the computer lab.

9.2.2 Updates on Short-Term Goals

Not applicable as this is the first cycle.

10 Accreditation Standards

Not Applicable

11 Resource Request/Adjustment

budget spreadsheet program review [XLS 2,010 KB 11/21/14]

BudgetChart [XLS 2,000 KB 9/8/14]

11.1 Long-range Adjustment to Resources

To meet the long range goals described in this document the following adjustments to resources are required:

- 1) Approximately \$78,000 added to the PTT salary line of the budget. This is to cover the higher wages for the new Senior tutor designation and additional hours to cover the following: expansion of SIET, dedicated tutor for online tutoring, expanded in-service/professional development opportunities for tutors, and visits to area high schools participating in College Now and Quick Step Plus.
- 2) 6 iPads for use in the online tutoring program. iPads are specified because the platform we will be using, Zoom, is maximized for iPad. The iPad app has more functionality than Android or PC. The projected cost is approximately \$3,000.
- 3) An addition PTR position, eventually growing to FT, to assist in the development and oversight of the new certification program described in this document, development of new tutor seminars for the professional development of the tutors associated with the certification, development and implementation of new tutor mentorship program, and development of programmed events in the MRC such as having guest speakers, colloquia, and a student math club.

11.2 Educational Technology Support

Currently we have a computer lab with 24 computers which is the second most used resource in the MRC (the tutors are the most used resource). Don Fox, a computer lab assistant from ATS, oversees the lab 30 hours per week. Individual students use the computer lab to work on their online homework as well as the specialized software we have installed, and faculty reserve the lab to bring their classes in to work on projects. The MRC also has three group study rooms, two of which have a computer and SmartBoard. These group study rooms and computers are used by student study groups as well as faculty committees. In addition, the MRC received a Technology Innovation Grant for a Wacom Intuos tablet, to use with the online tutoring service.

Future needs include a laptop computer that can be shared for the development of the tutor certification tests and 4 to 6 iPads for use with the online tutoring program. Currently the iPad app has more functionality than the desktop version Zoom which is the platform that will be used for online tutoring beginning in the Spring 2015 semester.

End of report