We recommend that the dedicated tutor program for mathematics be implemented again for the spring 2013 semester to determine the effectiveness that the program is having in our math classes. We recommend that the following changes be made to the dedicated tutor program based on the input from Instructors, students, DTs, and coordinator.

As coordinator I would like to implement the following:

1. Coordinator needs to communicate to the Instructor that the program is a team effort between them and their tutor

2. Coordinator needs to meet with the Instructors before the start of the semester to discuss ways in which they can utilize their tutor in class – this creates credibility with the students.

3. Coordinator should provide Instructors with a printout of their role with the DT

4. Coordinator should attend each class (sell the program to students) for which a dedicated tutor has been assigned to and explain the program and how it works to the students. I don’t feel the students see the DT differently from the tutors in the math lab or tutoring center.

5. Coordinator needs to contact the mathematics department of local universities for referrals and retired math teachers to be added to the DT program in math. These individuals have the experience and maturity that is needed when working with the basic skills students and they also would tend to be more flexible with their hours.

6. Have Instructors repeat more than once that the class has a dedicated tutor and that students should take advantage of this “free” tutoring. This should be done over the first few weeks as students are still adding classes.

7. Having the Instructor go over the survey with the students and how it should be completed. Many students did not circle A or B so I could not count their surveys.

8. Those Instructors who are using moodle can send out a news forum to students reminding Them of the tutor who is dedicated to their class and how he/she can be reached.

Participants:

<table>
<thead>
<tr>
<th>Participants</th>
<th>Instructor</th>
<th>Course</th>
<th>Section number</th>
<th>Dedicated Tutor</th>
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<tr>
<td></td>
<td>Sean Lloyd</td>
<td>Math 85</td>
<td>81659</td>
<td>Dottie Jacob</td>
</tr>
<tr>
<td></td>
<td>Cliff Nelson</td>
<td>Math 95</td>
<td>80342</td>
<td>Dottie Jacob</td>
</tr>
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<td></td>
<td>Victor Contini</td>
<td>Math 95</td>
<td>81829</td>
<td>Jason Su</td>
</tr>
<tr>
<td></td>
<td>George Golitzin</td>
<td>Math 101</td>
<td>81972</td>
<td>Jesse Jestadt</td>
</tr>
</tbody>
</table>

Coordinator

Andrea Wang
Aspects of the program that worked well for students

1. Having tutor in the class so the tutor can emulate the methods the Instructor uses to explain math problems. When a tutor shows a different method this can create confusion with the students.

2. Being available right before and/or after class was most helpful to students especially for saturday and evening classes, this means that the tutor must be flexible with their own schedule to accommodate students

The dedicated tutor program for math continued in math for the spring 2013 semester. Math101 was added to the classes since the success rates for Math 101 have been hovering around 40% since fall 2011.

There were 4 Instructors and 3 dedicated tutors, the names of which are listed in the beginning in the document. During the first week of classes the tutors were required to attend a 4 hour training seminar, developed by Cheo Massion, where they learned about the DT program. All new DTs are required to attend the training seminar before starting the program.

Regarding the effectiveness of the tutors:

1. Jason Su – Math 95 class met on Mon, Wed 4:10pm – 6:00pm

   He attended class during the first hour once per week. It’s is not clear whether it was the same day or not.

   Comments from the Instructor

   Jason and the Instructor did not communicate during the semester on ways to improve success. He wasn’t given the opportunity to tutor/participate during class time. Jason made himself available ½ before class one day and ½ hour after class the other day and then changed his schedule halfway through the semester which seemed to decrease his availability. The Instructor however is aware that he and the tutor must communicate and he will communicate with his DT this semester.

   The following are comments from the students:

   15 students took the survey and only 2 utilized him outside of class

   Jason received a low level of satisfaction on his surveys.

   What was most helpful?

   He had the knowledge to solve the problems.

   What could be improved upon?

   Have a better understanding of the steps the Instructor wants to see. This goes back to meeting with the Instructor to find out what is expected.

   He needed to be more patient and explain thoroughly.

   He was perceived as unfriendly and not helpful.
Comments from the Coordinator

Jason did not keep accurate or detailed records of his tutoring schedule. He always waited for students to approach him rather than approaching the students first.

Jason has not been asked to return to the DT program based on student comments and on his lack of detailed reporting and commitment to the program.

2. Dottie Jacob

Dottie had two classes: Math 85 and Math 95

Math 85 met Mon, Wed from 12:40pm – 2:00pm

For Math 85 Dottie attended class twice per week – the first ½ hr on Monday class and the last ½ hr on Wednesday

Comments from the Math 85 Instructor

In the Math 85 class she and the Instructor worked very well together. They communicated regularly. The Instructor and DT both walked around the room helping students during class time but students left class while this was happening. The Instructor feels that the in class time had limited value for the students. DT went above and beyond to meet and help students. She would grab them when she saw them walking on campus and try to get them to sit with her. She tutored before class, after class, in groups, one on one, and answered emails. The Instructor did write that this class was much less motivated than his other math 85 classes, and he felt that the in-class time was a waste of valuable hours since the students did not seem to care about getting help. The out-of-class tutoring was much more beneficial to those students who took advantage of it.

Comments from the Math 85 students

16 students took the survey and 7 utilized Dottie outside of class. Dottie received a High level of satisfaction overall from these students.

What was most helpful?

Being one on one with the tutor and being able to ask questions without being embarrassed

very helpful – understood everything she explained to me

she explained to me until I understood

getting help step by step on the problems was very helpful

being able to spend individual time with the tutor

What could be improved upon?

Offer different times to tutor, although she was very flexible so I am not sure why this person wrote that comment.
Comments from the Coordinator

Dottie was meticulous in her detailed reporting of her tutoring sessions. She was committed to the program, but there were many students who were not committed to the class. She created a subtraction worksheet. She responded to emails from students. I noticed from her logs that she had a lot of No Shows – students who had scheduled time with her but never showed up.

Dottie is not coming back this semester. She indicated that she did not like how the program was being run in that resources were being used for Math 85 students who were not taking advantage of the program and none was being used for math 103 students who would most likely be motivated since they have more at stake. Also, she felt that the program should not use COM students as tutors but instead should use undergraduates who have more experience and can draw upon those experiences and their maturity to counsel the math 85 students. She indicated that counseling more than tutoring is needed with the Math 85 students. Also, she mentioned that many students she dealt with had no intention of getting a degree but are only at COM to take dance or until a job comes up at which point they would withdraw from the course. From working with these students she realized that many students are in denial about their ability with Arithmetic. They say they can do it yet when asked to perform a certain calculation they are unable to complete it. She was questioning the reason counselors would tell these students to take math 85. We have no way of knowing what the students tell the counselors – they could be telling one thing to the counselor and something totally different to Dottie. In both Math 85 and Math 95 classes, students would sign up for tutoring and not show up.

I am sorry that Dottie will not be returning this semester.

3. Dottie Jacob

Math 95 met from 9:00am – 11:40am

For the Math 95 class Dottie attended the 1st hour of class each week

Comments from the Math 95 Instructor

In the Math 95 class she and the Instructor worked together. The Instructor had Dottie look over his practice tests for errors and offered feedback to him about students. Dottie worked with students during class when the Instructor assigned in-class work. He felt that Dottie was passionately committed to student success and that the tutoring sessions she held the hour before class were very beneficial to the students. She tutored individually and in groups and answered emails.

Comments from the Math 95 students

17 students took the survey and 8 utilized Dottie outside of class
7 students gave Dottie a High level of satisfaction and
1 student gave Dottie an above average level of satisfaction on the surveys.

What was most helpful?

she gave extra examples to help me understand problems
She helped me feel more confident in math
Being able to schedule a tutoring session that was convenient for me
she was clear and patient
she did her best to meet with students when they were available
having her tutor me one on one. She listened to me and focused on what I needed help with.
Has a good technique in teaching and explaining.
Having her available right before class was very helpful
Being able to email her
I felt supported

**What could be improved upon?**
Nothing, she’s awesome

Would like the DT in the class the whole class time (this was a 2hr 40 min class)
So she could be aware of what the Instructor had taught us

**Comments from the Coordinator**

Dottie’s reporting was detailed and meticulous.

Students appreciated her very much and were very grateful to have her to support and help them through the course. She had a much better experience tutoring this class than the Math 85 class.

I will miss Dottie next semester. She has the right attitude and is truly committed to helping the students succeed.

4. Jesse Jestadt

**Math 101 met Tu, Th from 11:10- 1:30pm**

Jesse attended class the 1st hour of class on Tuesday and tutored the hour before class on Tuesday and the hour after class on Thursday

**Comments from the Math 101 Instructor**

The Instructor and tutor did not work together at all. The Instructor did not utilize Jesse during class time. The Instructor stated that this was his weakest Math 101 class in 18 years and he could not tell whether the program was of value to his class or not. He stated that Jesse may have been a value to 1 or 2 students but few students were staying for his sessions by the end of the term. He indicated that Jesse’s services might have been better used in the math lab where he would have helped a greater number of students during those tutoring hours. The Instructor did comment that the DT could drill more on basic skills rather than working through the worksheets. The students were very much lacking in basic skills such as multiplication tables, decimal arithmetic, fractions, etc.
Comments from the Math 95 students

17 students took the survey and 6 utilized Jesse outside of class.
   3 students gave Jesse a High level of satisfaction and
   3 students gave Jesse an above average level of satisfaction on the surveys.

What was most helpful?

Homework help was the best
Helping to study for upcoming tests
Working right after class on homework when it was fresh in my mind
Loved that Jesse made up his own practice tests to help us
Walk through problems step by step
Knows math really well and teaches in a way that is easy to learn
Outside of class tutoring
The DT program worked for me – I used it every week after class

What could be improved upon?

Work the problems the same way as the Instructor.
Having two different styles of teaching is difficult to follow

Comments from the Coordinator

Jesse is an IS in the math lab so he is very knowledgeable about math. He spent a
great deal of time tutoring students. He was committed to the program and was very
supportive of the students. Jesse kept very detailed records of the time he spent
tutoring.

I understand when the students say that they don't like two methods of teaching
and Jesse has a tendency to show a different way if he does not agree with the teacher
or thinks his method is easier or better. Jesse went above and beyond as he made up
practice tests before the exam to give students extra practice. Students appreciated
that. He felt that he had to work very hard because the Instructor did not use a text and
students were not given ample opportunity to try practice problems before an exam. He
felt the Instructor should have been providing extra problems. I chose this class
specifically because the Instructor uses his own notes and worksheets and does not use
a book. I thought that a dedicated tutor would be beneficial to this class. It may have
helped a couple of students but that's not enough.

Jesse has indicated that he is not returning to the program.
Students who took advantage of the dedicated tutor and their grade for the class

Math 95 (81829)  Jason tutored 3 students during the semester
   All 3 of those students passed
Math 95 (80342)  Dottie tutored 13 students on a regular basis
   9 of the 13 passed the course
Math 85 (81659)  Don’t know exactly how many and which students Dottie tutored since she did not always put the student name on the tutor log
Math 101(81972)  Jesse tutored 7 students on a regular basis
   5 of the 7 passed

Summary sheet for Fall 2013 student success rates

<table>
<thead>
<tr>
<th></th>
<th>Math 85</th>
<th>Math 95</th>
<th>Math 95</th>
<th>Math 101</th>
</tr>
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<tbody>
<tr>
<td>CRN</td>
<td>81659</td>
<td>80342</td>
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<td>81972</td>
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<tr>
<td>First census</td>
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<td>40</td>
<td>37</td>
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<tr>
<td>Withdrawals (W's only)</td>
<td>3</td>
<td>4</td>
<td>8</td>
<td>16</td>
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<tr>
<td>Incompletes</td>
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<td>#students finished Course</td>
<td>25</td>
<td>19</td>
<td>34</td>
<td>21</td>
</tr>
<tr>
<td>Passed grade with C or better</td>
<td>10</td>
<td>12</td>
<td>28</td>
<td>11</td>
</tr>
<tr>
<td>% pass rate</td>
<td><strong>40.00%</strong></td>
<td><strong>63.16%</strong></td>
<td><strong>82.35%</strong></td>
<td><strong>52.38%</strong></td>
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</table>

As you can see our success rates this semester were not very good. Only the one Math 95 had a very good pass rate and I can’t say that it was due to the dedicated tutor because that was the class Jason was assigned. I would attribute the success of this class to the Instructor. What is troubling is that the 3 other classes had 2 great, devoted, exceptional tutors, yet the success rates are poor. Looking at the logs it appears that not enough students are taking advantage of the program but many of the students who did see the tutor did pass. In the case of Math 85 – we have to look at the class and the fact that the students were not motivated or interested in achieving success in the class and having a dedicated tutor in that class was not a good use of our resources.
Success rates – averages for all sections as of 1/10/2014

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<tr>
<th></th>
<th>Fall 2010</th>
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<th>Fall 2011</th>
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<tbody>
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<td>67.8%</td>
<td>66.67%</td>
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<td>67.80%</td>
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<td>Math 95</td>
<td>27.27%</td>
<td>58.33%</td>
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<tr>
<td>Math 101</td>
<td>29.53%</td>
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<td>43.66%</td>
<td>41.40%</td>
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<tr>
<td>Math 103</td>
<td>48.52%</td>
<td>55.92%</td>
<td>44.37%</td>
<td>57.34%</td>
<td>54.32%</td>
<td>44.98%</td>
<td>47.18%</td>
</tr>
</tbody>
</table>

Instructors must be willing to work as a team and utilize the DT in the classroom. Instructor should encourage students to take advantage of the dedicated tutor. When meeting with the Instructors I plan on offering the following suggestions to them:

1. There needs to be more communication and an ongoing dialogue between tutor and instructor and together they need to brainstorm ideas to encourage students to seek help.

2. Have tutors pass back exams, homework, quizzes – this can give credibility to the tutor.

3. If test corrections are allowed make it mandatory that the student must go over them with the tutor and that the tutor must sign off on them. Students could be given extra credit given for this.

4. Announce the program and introduce the tutor not only on the first day but multiple times during the first 3 weeks since students sometimes add late.

5. If conducive have students try problems in class – this gives the tutor an opportunity to walk around the room and see if anyone needs help.

6. Instructors/DTs brainstorm on how to get students to work with the DT early in the semester. Have a homework assignment that must be checked with the tutor and initialed by the tutor.

   For students who did not get the homework assignment initialed find out the reason
   Was it a scheduling conflict?
   Are they afraid to ask for help or don’t know how to ask for help?
   Maybe they didn’t need help with the assignment.

7. Instructors must identify “at risk” students early so the student(s) can be encouraged to seek help from the tutor.

8. Instructors should also make students aware of various websites that are helpful, such as interactmath.com;

9. Instructor must show he/she has confidence in the tutor so students see him/her as an “expert”.
Aspects of the program that should remain

1. DT’s need to contact their Instructor or Instructors and introduce themselves if it is a new team. DTs and Instructors need to decide
   a. when the best day is for the DT to be in the class.
   b. the preferred way to communicate: email, cell phone, in person
   c. set up time and day to meet during the 3rd week of classes

2. New DTs attend the mandatory DT orientation

3. DTs need to keep a log with the names of the students who come in for help. At the end of the term we can see how successful they were in the course.

4. DT’s need to learn all the students’ names.

5. DTs provide students with their email address on the first day so they can contact the tutor to schedule tutoring sessions.

6. DT survey the class at the first meeting to find out best times to offer tutoring.

7. DTs must be available just before or just after class for classes that meet once a week.

8. DTs must be flexible with their schedule to accommodate students

Concerns

1. How to get the Math 85 students motivated to want to achieve success. More counseling is needed with the Math 85 students; there is an advisory course, Counseling 125, that is associated with Math 85. We usually have more students placing into Math 85 than can be accommodated so if there truly are students who are taking a seat and they do not plan to transfer or to get an Associates degree then we somehow need to address that issue. I feel we should be accommodating students who are serious about their education and have placed a value on it.

2. Sharing with Counseling the concerns that Dottie expressed regarding Math 85 students.

3. How to ensure that Instructors and tutors are working as a team

4. Identifying “at risk” students in their class as soon as possible

5. Making sure the Instructors are utilizing the tutors in the classroom

6. How to address no shows in regards to tutors being paid or not

7. Is it possible to get more tutoring hours for the tutors?

8. There are students that are placed into Math 85 and may not really belong there. One reason why they may be placed incorrectly is that the students did not take the time to review before the exam. If a student feels he was wrongly placed he should study and retake the text. Students need to realize that before they take any exam they have to study. They need to take responsibility for their performance and not blame anyone else.
Some issues have been addressed for the spring 2014 semester

1. I have scheduled a meeting after the department meeting on Friday, January 10, with the math Instructors to go over the DT program.

2. I have emailed the Dept Chair in Mathematics at Sonoma State University requesting that he forward my request for tutors to math majors and/or to those hoping to be math teachers

3. I have added Math 103 to our DT program class offerings as I feel math 103 students are in need of extra help since our success rates in that class are very low and many of these students may be looking to transfer at the end of this semester.

4. I kept one Math 85 class since it is our lowest basic skills class and want to see if there is an issue with students being motivated at this lowest level. The tutor for this class started in Math 95 so I am hoping he can be a source of inspiration for some of these students.

5. I have met with my tutors and have made the tutoring assignments for the spring 2014 semester

<table>
<thead>
<tr>
<th>Course:</th>
<th>Section number</th>
<th>Dedicated Tutor</th>
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<tbody>
<tr>
<td>Math 85</td>
<td>11519</td>
<td>Mitchell Roberts</td>
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<tr>
<td>Math 95</td>
<td>11512</td>
<td>Luis Tercero</td>
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<td>Santi Walker</td>
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<td>Ben Wilson</td>
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