The Online Education Initiative
Tutoring Pilot Spring 2015
Early Results

Ireri Valenzuela
Sabrina Sencil

November 2015

Table of Contents

List of Exhibits

Executive Summary

The Online Education Initiative (OEI) is funded by a five-year grant from the California Community Colleges Chancellor's Office Academic Affairs and Technology, Research and Information Systems Divisions. The OEI was awarded to the Foothill-De Anza and Butte-Glenn Community College Districts in 2013-2014 and the Research and Planning Group (RP Group) for California Community Colleges was contracted as the independent third-party evaluator for the Online Education Initiative.

The initiative's goal is to increase the number of California Community College students that obtain associate degrees and/or transfer to four-year colleges and universities each year by providing high quality online courses coupled with a set of robust student support services. Online tutoring is one of several academic supports being offered to students taking courses through the Online Education Initiative.

The online tutoring pilot began in January 2015 with eight colleges participating in the implementation and evaluation of online tutoring services provided by NetTutor.[1] The pilot colleges included:

- Barstow College
- Columbia College
- Imperial Valley College
- Los Angeles Pierce College
- Mt. San Antonio College
- Ohlone College
- Saddleback College
- Victor Valley College

The primary purpose of the pilot was to learn about students' experience with online tutoring services and their perceptions of the impact online tutoring had on their success in their online class. Additionally, the pilot afforded the opportunity to develop policies and procedures, work out operational issues, and obtain feedback from faculty and staff at each college designated as the single point of contact (SPOC), OEI staff, and NetTutor staff to refine the online tutoring service delivery prior to scaling up the pilot in spring and fall 2015. This report presents evaluation results from the first semester of the OEI's online tutoring pilot (spring 2015).

Generally, early implementation findings suggest:

- **The integration of NetTutor into local CMS systems at each pilot college was not implemented within a timeframe typically followed by NetTutor.** Usually, the implementation of NetTutor begins prior to the start of any semester. However, due to a

[1] Link-Systems International (LSI) was selected by the OEI as the online tutoring service provider through a comprehensive review of online tutoring vendors and platforms that went through competitive bid process managed by the Foundation for California Community Colleges. NetTutor is the online tutoring service provided by (LSI).

compressed timeline between the signing of the contract and start of implementation, access to NetTutor was typically delayed at pilot colleges until a few weeks into the semester when full implementation and integration with the local college LMS could occur.

- **The communication structure put in place was not as effective as originally envisioned.** There were mixed satisfaction ratings among SPOCs and faculty related to the communication and support provided by NetTutor and OEI staff**.** However, it is important to take into account that as with any new pilot, developing relationships and effective communication processes takes time. The communication structure put in place, a single point of contact at each college who would serve as the liaison between faculty, the OEI, and NetTutor, took some time to refine in order to take into account local structures at each pilot college. The ability of SPOCs to effectively communicate with faculty on a regular basis is hindered by the fact that SPOCs are serving as liaisons between their college faculty and OEI on top of their fulltime jobs; this situation could have contributed to the mixed satisfaction with communication and support. Additionally, some colleges had tutorial center coordinators that sought direct involvement, while others did not, and many faculty indicated they would have liked more direct contact with the OEI staff.

- **The materials and effective practices provided to the colleges by NetTutor and OEI were well received by SPOCs and faculty.** Colleges appreciated NetTutor working with them to customize promotional materials and provide resources such as instructional videos. Additionally, colleges also appreciated learning about effective practices to promote the online tutoring services to their students.

- **The full potential of NetTutor's Rules of Engagement[2] was not attained.** Faculty received little to no information from SPOCs and NetTutor staff about the Rules of Engagement and how to use them effectively.

Pre-tutoring survey findings showed:

- **Nearly half of the pre-tutoring survey respondents indicated they had never accessed any type of tutoring prior to this semester** (in person and/or online). Two hundred and sixty-nine or 45.6% of 590 students who answered the question about prior tutoring experience indicated they had never used any form of tutoring.

- Out of 287 students who indicated they had taken at least one online course, **204 (71.1%) stated that they had passed all their online course(s) with a "C" or better** (a predictor for continued success in online courses).

Overall, NetTutor usage rates suggest:

- Information gleaned from various tutoring professionals and the vendor indicate that a **good target rate of utilization for online tutoring services would be approximately 10% of students initiating at least one interaction**. In spring 2015, the online tutoring participation rates for pilot group students were somewhat lower than anticipated. Seventy

[2] NetTutor's Rules of Engagement is a unique faculty support that allows faculty to communicate with the tutors about their expectations regarding the interactions between students and tutors.

two out of 833 students enrolled at the eight pilot colleges utilized NetTutor services resulting in a 8.6% participation rate.

- **The majority of students that did use NetTutor found the services easy to access, the platform easy to use, tutors that were personable and knowledgeable and that they learned valuable skill and techniques that helped them feel successful in their courses.**

Recommendations

The following recommendations are presented based on the findings presented in this report.

- Continue to find creative ways to **support faculty and provide them with additional customized resources to assist them in promoting the usage of the online tutoring services** such as a video for students that demonstrates a real student-tutor interaction.

- Develop an **outreach process to alert individual faculty members whose courses have low usage rates**.

- **Encourage faculty to make tutoring a class assignment**, provide extra credit and/or refer students not doing well in the course directly to tutoring in order to increase tutoring utilization rates.

- Develop a **systematic process to flag technical issues** with the online tutoring services to expedite them getting resolved.

- Re-examine the communication processes between OEI staff, faculty and other college staff participating in the OEI in order to **increase the effectiveness of information about OEI getting to faculty and staff in a timely manner.**

- **Simplify the process for faculty to customize and submit the Rules of Engagement (ROE) documentation.**

- **Identify a mechanism to enable data matching** between NetTutor usage reports, Canvas (the learning management system being adopted by the Online Education Initiative for OEI taught online courses), and the evaluation surveys

I. Introduction

The Online Education Initiative (OEI) is funded by a five-year grant from the California Community Colleges Chancellor's Office Academic Affairs and Technology, Research and Information Systems Divisions. The OEI was awarded to the Foothill-De Anza and Butte-Glenn Community College Districts in 2013-2014 and the Research and Planning Group (RP Group) for California Community Colleges was contracted as the independent third-party evaluator for the Online Education Initiative.

The initiative's goal is to increase the number of California Community College students that obtain associate degrees and/or transfer to four-year colleges and universities each year by providing high quality online courses coupled with a set of robust student support services. Online tutoring is one of several academic supports being offered to students taking courses through the Online Education Initiative.

The online tutoring pilot began in January 2015 with eight colleges participating in the implementation and evaluation of online tutoring services provided by NetTutor.[3] The pilot colleges included:

- Barstow College
- Columbia College
- Imperial Valley College
- Los Angeles Pierce College
- Mt. San Antonio College
- Ohlone College
- Saddleback College
- Victor Valley College

The primary purpose of the pilot was to learn about students' experience, with online tutoring services and their perceptions of the impact online tutoring had on their success in their online class. Additionally, the pilot afforded the opportunity to develop policies and procedures, work out operational issues, and obtain feedback from, faculty, staff at each colleges designated as the single point of contact (SPOC), the OEI and NetTutor staff to refine the online tutoring service delivery prior to scaling up the pilot in spring and fall 2015. This report presents evaluation results from the first semester of the Online Education Initiative's (OEI) online tutoring pilot (spring 2015).

Contents for the Remainder of This Report

Section II of this report describes the pilot colleges, program model, online tutoring services provided by NetTutor, data sources used in this report, and student characteristics. Section III describes the implementation of the program. Section IV portrays students' previous experiences with in-person and online tutoring. Section V describes students' participation in online tutoring provided by NetTutor. Section VI provides recommendation based on lessons learned from the pilot, conclusions and next steps.

[3] Link-Systems International (LSI) was selected by the OEI as the online tutoring service provider through a comprehensive review of online tutoring vendors and platforms that went through competitive bid process managed by the Foundation for California Community Colleges. NetTutor is the online tutoring service provided by (LSI).

II. The Colleges in the OEI Tutoring Pilot

This section provides a description of the colleges participating in the OEI spring 2015 tutoring pilot, the courses that were coupled with NetTutor's online tutoring services, and the overall program model. It also discusses the main data sources used in this report, and presents some general demographic and background characteristics of the students who participated in the pilot.

Colleges Participating in the Online Education Initiative Tutoring Pilot

Eight California community colleges were selected by the OEI to pilot online tutoring services. Box 1 provides a description of the colleges and courses offered.

Box 1: Colleges and Courses in the OEI Tutoring Pilot

The colleges are a mix of small, medium and large community colleges located in different geographic regions in California; North, Bay Area, Central and South. In addition, they represent rural, suburban and urban communities. The courses each college selected as part of the pilot, came from a list of 19 C-ID approved Associate Degree for Transfer (ADT) courses. Prior to the start of the spring 2015 semester, faculty from the pilot colleges submitted their courses to the OEI. These courses underwent a rigorous course design review process.

Barstow Community College: Administration of Justice 110, Economics 201, Math 110

Columbia College: English 100, History 130, Psychology 110

Imperial Valley College: English 100, English 100*

Los Angeles Pierce College: Child Development 100, Political Science 110, Sociology 110

Mt. San Antonio College: Administration of Justice 110, Geography 120, Psychology 110

Ohlone College: Economics 201, English 100, Psychology 110

Saddleback College: English 100, Philosophy 100, Political Science 100

Victor Valley College: Child Development 100, Philosophy 100

*Two different faculty members taught English 100 as part of the tutoring pilot.

The Online Tutoring Program Model

Eight community colleges were selected to pilot online tutoring services. Each pilot college was eligible to submit up to five courses. Courses eligible to be part of the pilot were required to be from a list of 19 C-ID approved Associate Degree for Transfer (ADT) courses. In addition, faculty recruited to participate in the pilot had to agree to have their courses undergo the OEI's rigorous course design review process.[4] The OEI fully covered all costs associated with online tutoring services provided by NetTutor for all eight colleges in the pilot.

[4] The OEI staff developed a scoring rubric based on national standards for high quality online courses. All courses taught in the spring 201 pilot were scored against this rubric.

A single point of contact (SPOC) was identified at each pilot college to be the liaison between OEI staff, Net-Tutor and faculty. In total, 22 faculty across these colleges participated in the pilot. The faculty taught a total of 24 online courses in the following subject areas: administration of justice, economics, mathematics, English, history, psychology, geography, child development, political science, sociology and philosophy.

NetTutor, the online tutoring service provider for the pilot, integrated NetTutor's online tutoring services into each college's local course management system (CMS), consisting of various versions of either Blackboard or Moodle. The integration of the online tutoring services into each college's CMS eliminated the need for students to download any additional applications thereby minimizing technical issues when accessing NetTutor and gave students a single sign-on access to NetTutor (rather than having students remember and log in with another username and password). All students enrolled in any of the courses offered through the pilot had access to online tutoring services via at least one link that was embedded into each instructor's online course homepage. Online tutoring services included:

- Live tutors with subject matter expertise in subject areas taught as part of the pilot[5] (Ask NetTutor)
- Asynchronous tutoring where students could submit a question on a 24/7 basis (Question and Answer Center
- Essay/paper review services on a 24/7 basis (Paper Center)

Every course had live tutors available for a minimum of 80 hours per week, with certain high volume subjects available 24 hours per day, seven days per week. Mathematics and English tutoring was available in both English and Spanish. Tutoring sessions were held on LSI's collaboration platform, the WorldWideWhiteboard, and all sessions were recorded and kept in a private archive. In addition, there was a one-day turnaround for asynchronous question submission and a two-day turnaround for asynchronous paper/essay review.

The OEI staff provided each college's SPOC, faculty and other college staff with a variety of strategies that had proved successful in promoting and creating awareness of online tutoring support and effective methods for embedding tutoring into the pilot's online courses. Additionally, NetTutor provided customized marketing materials for each college, such as flyers and a number of instructional videos on how to use the various services offered through NetTutor and faculty webinars. Faculty's role was to promote the online tutoring service to their students.

The Pilot Evaluation and Data Sources

Beginning in early spring 2015, the external RP Group evaluator worked closely with the OEI staff managing the implementation of the online tutoring pilot to develop the following survey instruments:

1. **Pre-tutoring survey:** Administered at the beginning of the semester/term prior to students using NetTutor. The purpose of the survey was to learn about students' previous experiences with face-to-face and/or online tutoring services prior to students utilizing the

[5] NetTutor hires tutors that are subject matter experts with previous teaching or tutoring experience. They all have a bachelor's degree; most also have post-graduate degrees.

services offered by NetTutor, and their perceived perceptions on whether previous tutoring had a positive impact on their success in the course(s).

2. **Post-tutoring survey:** Administered at the end of the semester/term. The goal of this survey was to understand how students learned about the online tutoring that was offered for their classes and their experiences with the online tutoring services.

3. **Faculty survey:** Administered at the end of the semester/term. The purpose of this was to understand faculty experiences with OEI staff, with NetTutor in general, and how online tutoring may have impacted their students.

4. **Single point of contact (SPOC) survey:** Administered at the end of the semester/term. This survey sought to understand SPOCs experiences with OEI staff, NetTutor and working with faculty at their college.

In addition, a few other data sources were used in the analyses presented in this report. These include:

5. **Qualitative data from interviews**: The RP Group evaluator conducted interviews with staff from Link-Systems International (NetTutor's parent company), NetTutor and OEI.

6. **Tutoring usage reports:** NetTutor provided the RP Group evaluator with information on the number of tutoring minutes used by students by college and course. They also provided information regarding the type of tutoring services accessed by students.

7. **Student data:** The Institutional Research Offices from each of the pilot colleges provided the RP Group evaluator with demographic and grade information for the students enrolled in the OEI courses.

During the course of the pilot, the RP Group evaluator encountered a problem matching NetTutor usage data with survey and student-level data collected through each college's local student information systems. Unfortunately, each system used a different unique student identifier, which prevented the evaluator from reporting success rates for students who used online tutoring vs. those that did not. Therefore, the student data presented in this report include all students who were enrolled at one of the eight OEI tutoring pilot colleges and were taking one of the OEI-approved online courses at each of these colleges. The data are broken down by gender, age, and ethnicity.

Student Characteristics across the Eight Pilot Colleges

Table 1 displays the demographic and academic outcome information for the 833 students enrolled in the online courses across the eight pilot colleges in spring 2015. **Almost two-thirds of the students enrolled in the online courses were female (63.6%)** and close to half (43.6%) were between the ages of 20-24. **Hispanic students (37.7%) and White Non-Hispanic students (34.5%) represented nearly three-quarters of all students in the pilot.** One hundred and fourteen students **(13.7%) were repeating their course.** The average **course success rate across the 24 pilot courses was 60.4%.** The course success rate represents the percentage of students who earned a passing letter grade (A, B, C, or P) out of the total number of students enrolled as of the

courses' census date.[6] Out of the 833 enrollments (unduplicated) at the eight colleges – including students who may have withdrawn from the course(s) after the census date – 72 were identified as belonging to students who used NetTutor services; **the tutoring participation rate was 8.6%.**

Table 1: Pilot Colleges' Student Characteristics and Academic Outcomes, Spring 2015		
Student Characteristics	**Proportion of Students (%)**	**Number of Enrollments[1]**
Gender		
Female	63.0%	525
Male	36.1%	301
Unknown	*	<10
Age Range		
19 or younger	20.8%	173
20-24	43.6%	363
25-29	15.8%	132
30-39	12.1%	101
40 or older	7.7%	64
Race/Ethnic Group		
African-American	7.0%	58
American Indian or Alaska Native	*	<10
Asian	10.6%	88
Filipino	2.3%	19
Hispanic	37.2%	310
Multi-Ethnicity	5.3%	44
Pacific Islander	*	<10
Unknown	2.8%	23
White Non-Hispanic	34.5%	287
Has Previously Taken Course**		
No	86.2%	718
Yes	13.7%	114
Total Number of Students Enrolled		833
Course Success Rate[2]	*60.4%*	
Tutoring Participation Rate[3]	*8.6%*	

*Fewer than 10 students.
**Repeat data were not available for one student.
[1]The number of enrollments is not an unduplicated headcount.
[2]The course success rate represents the percentage of students who earned a passing letter grade (A, B, C, or P) out of the total number of students enrolled, and students who withdrew after the courses' census date
[3]Based on NetTutor usage data, students received online tutoring services provided by NetTutor for 72 course enrollments from the eight pilot colleges.

[6]The Course Success Rate (defined below) is the common measure used by the CCCCO and the institutional researchers across the 113 CCCs.
Definition: Percentage of students who receive a passing/satisfactory grade (C or higher).
Numerator: A, B, C, CR, IA, IB, IC, IPP, P
Denominator: A, B, C, CR, D, F, FW, IA, IB, IC, ID, IF, INP, IPP, P, NC, NP, W
Excluded grade notations: DR, IP, IX, MW, RD, UD, XX

Table 2 provides demographic information for the students who withdrew from their online course(s). Of the 833 enrollments in the pilot online courses, 198 (23.8%) resulted in withdrawals before the end of the spring semester. **More than two-thirds of the students who withdrew from the online courses were female (68.7%) and close to half of the students (42.4%) were between the ages of 20-24. Hispanic students represented half (50.0%) of the students who withdrew** from their course(s) and slightly more than a quarter of the students who withdrew were White Non-Hispanic (27.3%). Nearly one-fifth (18.7%) of the students who withdrew from the class had previously enrolled in the course.

Table 2: Characteristics of Students Who Withdrew from Their Course(s)		
	Proportion of Enrollments (%)	Number of Enrollments[1]
Gender		
Female	68.7%	136
Male	30.8%	61
Unknown	*	<10
Age Range		
19 or younger	19.7%	39
20-24	42.4%	84
25-29	19.7%	39
30-39	13.1%	26
40 or older	5.1%	10
Race/Ethnic Group		
African-American	6.6%	13
American Indian or Alaska Native	0.0%	0
Asian	5.6%	11
Filipino	*	<10
Hispanic	50.0%	99
Multi-Ethnicity	6.6%	13
Pacific Islander	*	<10
Unknown	*	<10
White Non-Hispanic	27.3%	54
Has Previously Taken Course**		
No	81.3%	161
Yes	18.7%	37
Total Number of Students Who Withdrew From Their Course(s)		198

*Fewer than 10 students.
**Repeat data were not available for one student.
[1]The number of enrollments is not an unduplicated headcount. A student may be counted more than once if they are withdrew from more than one course at their college; the students' withdrawal from the course(s) was recorded with a "FW" or "W" in the students' academic records at the institution.

Table 3 outlines the course success rates by gender, ethnicity, and age of students enrolled in the pilot's online courses. **Female students' achieved a lower course success rate than their male peers (54.9% vs. 60.6%).** Students who were 19 years old or younger (63%), 20-24 (60.9%), 30-39

(62.4%) and 40 or older (62.5%) achieved a higher course success rate than their peers; **students between the ages of 25-29 had the lowest course success rate (53.0%), which was seven percentage points lower than the overall average (60.4%).**

When comparing average course success rates by ethnic group, Filipino students had the highest course success rate (89.5%) followed by Asian (80.7%) students and White Non-Hispanic students (66.2%). The success rates for African-American students (56.9%), Hispanic students (50.0%), students who identified more than one ethnicity (50.0%), and students who did not report their ethnicity (52.2%) were lower than the overall success rate (60.4%). **Students who had not previously taken the course had a higher success rate than their peers who were repeating the course for this semester (61.7% vs. 51.8%).** It should be noted that pilot data show that **a third of Hispanic students in the sample, which represent nearly 40% of the overall pilot student population successfully completed their online course(s);** this gap is 10.4 percentage points lower than the overall average (60.4%) course success rate. African-American students (7% of the pilot sample) had a success rate that was 3.5 percentage points lower than the overall average (60.4%) course success rate.

Table 3 : Spring 2015 Course Success Rates by Student Groups		
	Average Course Success Rates[1]	Number of Enrollments[2]
Gender		
Female	54.9%	525
Male	60.6%	301
Unknown	*	<10
Age Range		
19 or younger	63.0%	173
20-24	60.9%	363
25-29	53.0%	132
30-39	62.4%	101
40 or older	62.5%	64
Race/Ethnic Group		
African American	56.9%	58
American Indian or Alaska Native	*	<10
Asian	80.7%	88
Filipino	89.5%	19
Hispanic	50.0%	310
Multi-Ethnicity	50.0%	44
Pacific Islander	*	<10
Unknown	52.2%	23
White Non-Hispanic	66.2%	287
Has Previously Taken Course**		
No	61.7%	718
Yes	51.8%	114
Overall	*60.4%*	*833*

*Fewer than 10 students.
**Repeat data were not available for one student.
[1] The course success rate represents the percentage of students who earned a passing letter grade (A, B, C, or P) out of the total number of students enrolled, which includes students that withdrew after the courses' census date; 60.4% of 833 students enrolled successfully completed these online courses.
[2]The number of enrollments is not an unduplicated headcount. Students are counted once for each course in which they are enrolled at their college.

The statewide course success rate for online courses was 62.6%[7] for spring 2015. When looking at the differences in statewide online student success rates for Asian students (71.8%), White Non-Hispanic students (79.4%), Hispanic students (58.0%), and African-American students (46.3%) (student groups with highest enrollments in spring 2015) we can see that the success rates for Asian and White Non-Hispanic students were above the overall statewide online course success rate (62.6%) while **the success rates for Hispanic (58.0%) and African-American (46.3%) students were 4.6 and 16.3 percentage points, lower than the statewide course success rate of 62.6%, respectively.**

[7] Data Source: California Community Colleges of Chancellor's Office Management Information Systems (COMIS) database retrieved on February 22, 2015.

It is important **not** to make assumptions regarding online course success data from the statewide and OEI online course success data presented above. The statewide data comes from online courses taught across 113 California community colleges and represent a very different mix of courses from those 24 courses taught across the eight community colleges in the OEI tutoring pilot. As time goes on, the RP Group evaluator will continue to look at statewide online course success data alongside OEI online course success data in order to look at any changes over time in course success rates between online courses taught through OEI versus online courses that have not undergone the OEI course review process.

Table 4 demonstrates the grade distribution for all students enrolled in the 24 online courses that were included in the pilot across the eight colleges. Due to the lack of a common identifier between survey, college data and NetTutor data, we were unable to match institutional data with NetTutor usage data resulting in not being able to compare success rates between students who used NetTutor versus those who did not. A little more than a quarter of the students across the 24 courses received an A (26.4%). Students that received a B accounted for 19.9% of students and 14.0% of students received a C. The remaining group of students (39.6%) did not receive a passing grade or withdrew from the course after census.

Table 4: Grade Distribution for Spring 2015 Pilot Courses

Grade	Frequency	Percentage
A	220	26.4%
B	166	19.9%
C	117	14.0%
D	36	4.3%
F	90	10.8%
FW[8]	6	0.7%
W	198	23.8%
Total	**833**	**100.0%**

[8] Victor Valley College uses "FW: Failing. The FW symbol is assigned by the faculty member of record to a student who has both ceased participating in a course after the last day to officially withdraw from the course without having achieved a final passing grade and who has not received district authorization to withdraw from the course under extenuating circumstances."

III. Online Tutoring Pilot Program Implementation

This section describes how the online tutoring model was implemented in the first semester of the pilot.

Program Operations

In spring 2015, the OEI launched a small pilot of online tutoring service for OEI reviewed courses taught by faculty at the eight colleges participating in the pilot (refer back to Box 1 on pg. 4 for a list of the pilot colleges). Two OEI staff members, the Chief Academic Officer and the Director of Basic Skills, with the support from a Program Support Coordinator oversaw the day-to-day operations of the online tutoring pilot. The communication process put in place by the OEI staff involved the identification of a single point of contact (SPOC) at each of the eight colleges; the goal being that the SPOC would serve as the communication liaison between faculty and OEI staff.

The OEI staff worked with NetTutor, SPOCs, faculty and IT personnel to develop systems and processes that facilitated the implementation of the online tutoring pilot. These included:

- systems and processes for embedding NetTutor into each college's local course management (CMS) system,
- creating live links for students to access the tutoring services directly from of each faculty's course home page,
- identifying ways to support SPOCs and faculty in the promotion of online tutoring services to students,
- ensuring faculty were aware of NetTutors' Rules of Engagement and took advantage of the process, and
- developing a process for NetTutor to provide usage data to the OEI staff.

NetTutor Integration

There was consensus among the OEI and NetTutor staff that the initial timeline for integration of NetTutor into the pilot colleges' course management systems, "hit a bump in the road." Potential reasons may be attributed to the timing of when the contract between the OEI and LSI was finalized, the accelerated implementation schedule of NetTutor, which did not start until three weeks into the spring 2015 semester/term and did not give NetTutor staff the necessary time to develop relationships with faculty and staff from the pilot colleges, and unforeseen technical issues that occurred at the colleges during the integration process.

Prior to the integration of NetTutor into each college's CMS system, a one-hour technical implementation and NetTutor orientation call was scheduled. Participants in these meetings included staff/faculty assigned as the single point of contact (SPOC), CMS administrator or Information Technology (IT) staff, tutoring coordinator, OEI staff, and the NetTutor team.

Implementation of Support from OEI and NetTutor Staff

The following section includes both quantitative and qualitative data collected at the end of the 2015 semester/term. Surveys were administered to SPOCs and faculty; the response rates were 100% (8) for SPOCs and 45.5% (10 out of 22) for faculty. Additionally, interviews were conducted with OEI

and NetTutor staff. These interviews allowed the RP Group evaluator to learn about the views of OEI and NetTutor staff on how well the online tutoring services were implemented.

NetTutor Staff

After the integration of NetTutor, a number of supports were put in place by NetTutor. These support included check-in calls with the colleges, webinars and technical support. Check-in calls were scheduled by NetTutor staff with the SPOC at each of the eight colleges (faculty and other staff were welcome to attend).

Overall, the SPOCs felt supported by NetTutor staff. They mentioned NetTutor staff were easy to work with, the calls kept the College and the NetTutor staff on the same page, and they built confidence that NetTutor staff were concerned with the quality of the online tutoring services they were providing. One of the SPOCs commented;

> *Unfortunately, I was only available for one of the check-in calls (which was great). However, throughout the semester, I was able to contact NetTutor staff as needed. The service was great and I am very pleased with NetTutor.*

However, one SPOC mentioned that while the support provided in the "check-in" calls was helpful, at times there seemed to be a lack of follow-through by NetTutor staff after the calls to address concerns that were raised during the calls.

Online Education Initiative Staff

In addition to asking about support from NetTutor staff, SPOCs and faculty were also asked to give their opinions regarding how well they felt supported by OEI staff. As mentioned in the program operations section on page 9, the role of the single point of contact (SPOC) was to facilitate communication between faculty and OEI staff. Therefore, it was not surprising that 100% of the SPOCs indicated high levels of satisfaction with the general support, communication, responsiveness provided by OEI staff. However, the evaluation also showed that there were variations across colleges in the amount of time a SPOC had to communicate with faculty and vice versa, which led some faculty to communicate directly with OEI staff and other faculty to feel a lack of information exchange regarding the tutoring resources being provided to their students. Some of the early communication problems experienced by faculty could have also been attributed to the delay in implementation of NetTutor services and a lag in receiving documentation about the service. The communication problems at the beginning of the pilot are reflected in the comments made by two faculty in open ended responses.

> *OEI was very slow to provide detailed information about tutoring as well as making the service available to students. There was nothing until about the 5th week of the term, which is well past the time that struggling students can be identified and need to receive help. Tutoring has to be set up before the term begins and so that it can be incorporated into the orientation activities of the first week.*

> *I do not think it worked very well being implemented so late in the term. Most of the students that could benefit most from the program had already dropped the course by the time the resources had become available. Having it available before the semester so it can be part of the syllabus and discussions from day one will be more beneficial in my opinion.*

Faculty who communicated directly with OEI staff had positive experiences and expressed that OEI staff had been very supportive and communicated regularly with faculty.

Materials and Support Creating Awareness and Promoting Online Tutoring Services

Box 2
Outreach Materials Provided to OEI Pilot Colleges by NetTutor

1. **Sample Announcement:** Provided different types of language that would let students know about NetTutor.
2. **Suggested Email Language:** Provided language that would help encourage students to use NetTutor during key periods in the semester such as holidays and final exam prep.
3. **Flyers:** A customizable flyer template that provides students with general information about NetTutor.
4. **Videos:** Provided students with short tutorials on how to access NetTutor, details on the various tutoring options available to students, details on how to use the variety of tools in NetTutor, and a demonstration on how to use the NetTutor Paper Center.
5. **Sample Letter to Students:** Provided language for faculty on steps students could take to prepare for a tutoring session.

Outreach materials

At the beginning of the spring 2015 semester/term, NetTutor staff provided each pilot college with an "Implementation and Awareness Kit" that contained a variety of materials that would help encourage students to use the services provided by NetTutor (Box 2 provides a brief description of these resources).

A survey was administered to both SPOCs and faculty at the end of the spring 2015 semester/term. A four-point Likert scale (1=Very dissatisfied, 2=Somewhat dissatisfied, 3=Somewhat satisfied, 4=Very satisfied, and 0=No opinion) was used to measure their satisfaction with the outreach materials provided by NetTutor: One hundred percent (8) of the SPOCs and 45.5% (10 out of 22) of the faculty responded to the survey.

Table 5 shows the overall satisfaction levels with the various NetTutor resources were moderately high, with a mean score of 3.5 or higher. Their highest average level of satisfaction was with the captioned videos showing students how to use NetTutor (3.6), followed by the content of NetTutor's Implementation and Awareness Kit (3.5) and the content of other written materials (3.5).

Table 5: Faculty and SPOC's Level of Satisfaction with Resources Provided by NetTutor				
Resources provided by NetTutor	Mean Rating	Number of Rated Responses	Number of No Opinions	Skipped
The captioned videos showing students how to use NetTutor	3.6	14	4	0
The content of the NetTutor Implementation and Awareness Kit	3.5	11	6	1
The content of the other written materials, such as flyers	3.5	13	4	1

In addition to the videos that demonstrated how to use NetTutor services, a faculty member suggested another type of video that would be a helpful resource:

> *I would like to see a video in which tutors and real students interact, which would demonstrate the process of engaging and how positive it can be.*

A unique faculty support provided by NetTutor is their Rules of Engagement (ROE); a process by which the faculty can communicate with tutors about their expectations regarding the interactions between students and tutors. There were mixed responses from faculty when asked how satisfied they were with the Rules of Engagement. A few faculty shared comments about why they did not find the ROE helpful. Three stated they were not aware or did not receive a copy of the rules. One faculty member shared that she/he recalled it being "briefly mentioned" in a conference call, but not since. Given these comments, it is possible that the lack of information and clarity about the Rules of Engagement might be attributed to the compressed implementation timeline and the lack of relationships that NetTutor staff had with faculty at the beginning of the pilot. However, one faculty member noted that since using online tutoring through NetTutor, the need and value of the Rules of Engagement became "clearer."

Strategies and support for creating awareness

In addition to the written and digital materials provided by NetTutor, the OEI staff provided SPOCs and faculty at each pilot college with a number of strategies meant to assist them in promoting online tutoring services to students enrolled in their online courses. These strategies included:

- Embedding a link to NetTutor on the course's homepage;
- Including information and embedding a link to NetTutor in the student welcome email and discussion postings;
- Sending the video links provided by NetTutor directly to students;
- Giving students an introductory assignment (could give extra points) that requires them to log into NetTutor;
- Include a direct link to NetTutor in course assignments;

- Include an embedded NetTutor reminder in regular student emails and discussion postings;
- Send a separate email in week 1; and
- Send a short email to students in week 3 reminding them of NetTutor.

A four-point Likert scale (0=No opinion, 1=Very dissatisfied, 2=Somewhat dissatisfied, 3=Somewhat satisfied, and 4=Very satisfied) was used to gauge the level of satisfaction with the methods for creating awareness about online tutoring services and practices to encourage usage of NetTutor among SPOCs and faculty. Table 6 presents the satisfaction ratings for both SPOCs and faculty combined. When looking at the satisfaction ratings for SPOCs compared to those of faculty, SPOCs were more satisfied. All eight SPOCs who responded had a 3.8 satisfaction level for both methods of creating awareness and effective practices, while nine out of ten faculty that responded had a 3.2 and 2.9 satisfaction levels, respectively. As mentioned earlier in this section, the established communication process of going through a "single point of contact" who would be the liaison between OEI staff and faculty was not as effective as originally envisioned. Therefore, faculty satisfaction ratings with the methods and practices to encourage student awareness of online tutoring services, were not surprising given the inconsistencies among colleges in terms of effective communication between SPOCs and faculty, which at times resulted in information not being communicated from SPOCs to the faculty, and vice versa.

Table 6: Satisfaction with Methods for Creating Awareness and Practices to Encourage Online Tutoring Usage

	Mean Rating	Total SPOC Responses	Mean Rating	Total Faculty Responses
Methods for creating awareness of online tutoring provided by OEI staff	3.8	8	3.2	9
Effective practices for embedding tutoring into pilot courses provided by OEI staff	3.8	8	2.9	9

One SPOC shared that the combination of materials provided by NetTutor and the awareness and usage strategies provided by OEI were both very helpful:

> *The support documents and directions from NetTutor were very helpful. Our faculty had resources prepared and easily shared with students. They were given recommendations on how to effectively incorporate tutoring services into their course assignments.*

A faculty member added that she found the flyer, the introductory material, and the word of mouth recommendations from students at our face-to-face sessions most effective in encouraging and referring students to use NetTutor.

Promoting online tutoring services

Once NetTutor was made available, faculty were asked to promote and encourage students to use the online tutoring services. Table 7 shows the various ways that faculty encouraged student usage of NetTutor. By far, the most common way faculty promoted online tutoring was to recommend

tutoring to the entire class; nine out of ten faculty (90%) indicated they used this approach. Three faculty (30%) recommended online tutoring service to students based on their performance in class, two faculty (20%) made it a required class assignment, and one (10%) provided extra points. One out of the 10 faculty responded that they did not directly encourage students to use NetTutor. The instructor mentioned:

I assumed that if students felt they needed it, that they would use it.

Table 7: Methods Used by Faculty to Encourage Students to Use NetTutor*		
	Responses	Percentage
Recommended tutoring to the entire class	9	90%
Recommended tutoring to specific students based on their performance in class	3	30%
Made it a required class assignment	2	20%
Provided extra points	1	10%
I did not directly encourage the use of NetTutor	1	10%
Total Respondents	**10**	

*Check all that apply question.

Towards the end of the semester students who had taken OEI online courses were given a post-tutoring survey to complete. When asked how their instructor encouraged them to utilize NetTutor the majority of students 131 (70.4%) out of the 162 that completed the survey answered that their teacher recommended tutoring to the entire class. This response is consistent with the method most utilized by faculty to promote NetTutor to their students. Table 8 demonstrates students' responses to the strategies used by faculty to encourage them to use tutoring.

Table 8: Strategies Students Identified Were Used by Faculty to Encourage Use of NetTutor*		
How did your instructor encourage you to go to tutoring?	Responses	Percentage
Recommended tutoring to the entire class	114	70.4%
Recommended tutoring to specific students based on their performance in class	12	7.4%
Made it a required class assignment	26	16%
Provided extra points	16	9.9%
Did not directly encourage the use of NetTutor	10	6.2%
Other	5	3.1%
Total Respondents	**162**	

*Check all that apply question.

Making NetTutor accessible to students

As mentioned in the section strategies and support for creating awareness on pg. 13, OEI staff provided faculty with a number of ideas related to making NetTutor visible and accessible to students. Table 9 illustrates which of these strategies were used by faculty. The most frequently used strategy used by faculty (90%) was to embed the link to NetTutor directly into their courses' home page. Five (50%) faculty mentioned sending students' links to NetTutor's instructional videos and embedding NetTutor reminders inside their class assignments. Three faculty (30%) indicated embedding NetTutor reminders in their regular emails and discussion postings for students, and two (20%) indicated that they embedded NetTutor's link in their welcome email and discussion postings for students. Three faculty selected "Other" and two of them shared the methods they used to make NetTutor accessible to students:

I created a YouTube video to show students how to access [NetTutor].

NetTutor was included in the main class menu, with a dedicated NetTutor page including links to the service as well as instructions and videos to assist students in using the service. Students were reminded of the service in weekly class letters and announcements.

Table 9: Ensuring Students Have Easy Access to NetTutor*		
	Responses	Percentage
I included an embedded link on my course's home page.	9	90%
I sent links to instructional videos provided by NetTutor directly to my students.	5	50%
I included an embedded NetTutor reminder inside my class assignment.	5	50%
I included an embedded NetTutor reminder in my regular student emails and discussion postings.	3	30%
I included information and directly embedded a link to NetTutor into my students' welcome email and discussion postings.	2	20%
I didn't do anything.	0	0%
Other	3	30%
Total Respondents	**10**	

*Check all that apply

In addition to promoting and encouraging students to use NetTutor, faculty were also asked if there were other types of supports they recommended to students. Table 10 presents the types of additional academic supports suggested by faculty. All faculty respondents indicated that they encouraged their students to reach out to them for help, nine faculty indicated they schedule virtual, phone and/or in person meetings with students, and six encouraged students to use the college's tutoring center. One faculty member also indicated suggesting to students that they create study groups with their peers, while another shared that the only academic support he/she recommended to students was NetTutor. Three faculty checked the "Other" answer choice and shared some additional ways they provide academic support to their students in open-ended responses. For example, one faculty shared:

I have set up blogs within the class for students to interact with each other, and I offered extra credit points for doing so. In addition, I scheduled a face-to-face library orientation for their research essays, and I came early and stayed after the session to work with students individually; I also went to campus and offered a voluntary session in which I worked with students individually on their research papers.

Table 10: Other Academic Supports Shared with Students		
Answer Choices (check all that apply)	**Responses**	**Percentage**
I encouraged my students to reach out to me for help with course materials.	10	100.0%
I encouraged my students to schedule times with me virtually, via telephone, and /or in person.	9	90.0%
I suggested students use the tutoring center on campus.	6	60.0%
I suggested students create a study group with their peers.	1	10.0%
I didn't provide my students with other academic support resources except for NetTutor	1	10.0%
Other	3	30.0%
Total Respondents	**10**	

IV. Students' Previous Experience with In-Person and Online Tutoring

Pre-Tutoring Student Survey

Faculty teaching online courses as part of the tutoring pilot were asked to administer a pre-tutoring survey to their students approximately one week into the 2015 spring semester/term. **The purpose of the survey was to learn about students' previous experiences with face-to-face and/or online tutoring services prior to students utilizing the services offered by NetTutor, and their perceived perceptions on whether previous tutoring had a positive impact on their success in the course(s).** Of the 22 faculty, 21 administered the survey to students. A total of 598 out of 858[9] (69.7% response rate) students across the eight pilot colleges completed the survey (see Appendix A for the number of completed surveys by college and course). This section provides findings from the pre-tutoring survey.

Summary of Findings

For students who had previously used in-person or online tutoring, the accessibility and convenience of online tutoring versus in-person tutoring was the main reason students would gravitate to online tutoring. Otherwise, students' experiences with online tutoring were similar to students' experiences with in-person tutoring. Regardless of tutoring modality, the majority of students cited that tutors were knowledgeable in their subject area, helped them understand materials in a different way, and taught them new skills. However, a couple of things stand out from the survey: 1) **nearly half of the respondents indicated they never accessed any type of tutoring**, and 2) **the majority of students who had used online tutoring had used the asynchronous types of online tutoring modalities.** This result is not surprising given that asynchronous is the most available type of online tutoring.

Detailed Findings

- Two hundred and sixty-nine or 45.6% of 590 students who answered the question about prior tutoring experience indicated they had never used any form of tutoring (in-person and/or online), while 321 or **54.4% indicated they had used some type of tutoring**.

- Of the 321 students who indicated having used tutoring, they **most frequently identified being tutored in-person**[10] (58.3% cited getting in-person tutoring at their college and another 57.9% cited getting tutored by friends or family).

- Out of 271 students, only 34 (**12.5%) reported that they participated in online group tutoring and 33 students (12.2%) reported ever being logged on with a tutor at the same time** (synchronous online tutoring). **At least half of students reported having used asynchronous tutoring.** The most cited asynchronous methods included: reading online supplemental materials and/or study guides (50.6%) and watching videos on specific topics

[9] The survey was administered prior to census, therefore students who may have dropped the course are counted in the total number of survey respondents.

[10] This question was check all that apply, therefore, students could have checked more than one answer and the percentage does not total 100%.

(44.6%). Table 11 summarizes the types of online tutoring accessed by students including synchronous and or asynchronous online tutoring.

Table 11: Types of Online Tutoring Accessed by Students (synchronous or asynchronous)		
Types of Tutoring	Count	Percent
Synchronous		
Group tutoring	34	12.5%
My tutor and I were logged on at the same time (Skype, chat, phone, Google hangouts)	33	12.2%
Asynchronous		
Read online supplemental materials and or study guides	137	50.6%
Saw videos on specific topics	121	44.6%
Submitted question or assignment and got a response at a later time via email	99	36.5%
Self-paced online tutorials	68	25.1%
Using text and or social media	63	23.2%
Other	*	*
Total	271	

*Fewer than 10 responses.

Table 12 presents a variety of reasons why students choose to utilize online tutoring services. The most frequent response was that online tutoring was available at times that were convenient for them (67.2%). A quarter (25.1%) indicated that the tutoring center hours did not work with their schedules and that they did not study well in a noisy environment (25.1%). Other reasons cited by students included living far from campus (22.9%), not having reliable transportation (8.9%), and that the on-campus tutors were not available for the subjects the students needed (6.3%). One of the "Other" reasons cited by a student was that it was "quick and accessible."

Table 12: Reasons Students Chose Online Tutoring*		
Online Tutoring Choices	Count	Percent
I can access tutoring when it's convenient for me	182	67.2%
The tutoring center hours don't work with my schedule	68	25.1%
I don't study well in a noisy environment	68	25.1%
I live far from campus	62	22.9%
I don't have reliable transportation	24	8.9%
Tutors are not available for the subjects I need on campus	17	6.3%
Other	11	4.1%
Total	271	

*Check all that apply

- Regardless of whether students had used face-to-face and or online tutoring, students' feedback about their experiences with a tutor indicated they felt tutors were knowledgeable about the subject matter.

  Out of 296 students who saw a tutor in person,[11] 193 (65.2%) mentioned feeling their tutor was knowledgeable about the subject matter and 133 (49.1%) of 271 students that had met with a tutor online did so as well. A very small number of students indicated tutoring was

[11] Out of the 321, 25 indicated having "online tutoring experiences."

not helpful; 11 (3.7%) of 296 students who had in-person tutoring and 19 (7.0%) out of the 271 who took online tutoring, respectively.

Additionally, of the students who utilized online tutors, 101 students (37.3%) indicated their tutors explained things in different ways to make sure they understood the materials. Close to a third of respondents (31.4%) indicated that online tutoring taught them new skills, and almost a quarter (23.6%) indicated that online tutoring helped them pass their class. Fifty-one students (18.8%) responded that their tutors and professors explained things differently.

- When asked if they had ever taken an online course, 27.3% (130) of 476 students responded that the course they were currently enrolled in was their first online course.

- Out of 287 of the students who indicated they had taken at least one online course, 204 (71.1%) stated that they had passed all their online course(s) with a "C" or better.

Qualitative Findings

Most valuable things about in-person tutoring

Three hundred and seventy-one students shared what they personally found most valuable about in-person tutoring and four major themes emerged from the analysis of the open-ended questions.

1. **Developing a personal connection with their tutor.** Students appreciated in-person tutoring because it gave them the opportunity to establish personal connections with their tutors. Having these connections made students more comfortable to ask questions about things they found challenging and/or felt confused about. In the words of two students:

   I found that in-person tutoring was much more personal and helped me better understand my subject and apply it to my life.

   You can communicate easier. I find it less stressful to visually see the person over talking on the phone or through a computer.

2. **Different ways of learning were addressed by in-person tutoring.** Students expressed that many tutors were able to adapt to different learning styles and found various ways of explaining course materials to students who were having trouble understanding. One student shared:

   Face to face interactions have always been helpful for me. I learn better with hands-on tutoring and practicing the new skills with the instructor there to correct my mistakes and show me where I began to get lost.

A different student added:

   Things could be explained on paper and I learn easier when I see things. I learn better with person-to-person teaching. Tutoring helped a lot to learn my style of learning. Not only verbal, but illustrations and or combo works best for me.

3. **Students were able to get immediate feedback and assistance.** One thing about in-person tutoring that students felt was useful was the immediacy of the help and feedback they received during their tutoring sessions. Two students captured this sentiment:

   Hands-on tutoring! Demonstrations and skills are taught right there at that very same moment.

   I was able to ask all the questions I had on the spot and not wait for an email.

4. **Tutoring taught them new skills.** Some students felt that in addition to getting help with a subject specific assignment or problem they also learned new skills that could be applied beyond the particular course they were being tutored for. One student shared:

   [I got] new study ideas, [and learned] how to use web library access.

Least valuable things about in-person tutoring

A total of 341 students answered the question that asked them to identify what was least valuable about their previous experience with in-person tutoring. Two general themes were persistent throughout students' responses.

1. **Colleges had limited tutoring center hours, scheduling and availability of tutors.** Many students shared that when accessing in-person tutoring at their college, there were not enough tutors to help all of the students who needed assistance or that tutoring sessions were too short. In one student's own words:

   What I found the least valuable about in-person tutoring was [that the tutoring center did] not have enough tutors working or their schedule [did] not meeting my schedule when I need tutoring.

   Another student added that at his/her college tutoring session were time limited:

   There was not a lot of time. The college only offers you 30 minutes [per tutoring session] which is nothing. [I] had to go several times a week because time would never help.

2. **The range and quality of tutors**. While a number of students mentioned they felt tutors explained things well, others had the opposite experience. One student shared:

   If I had to single one thing, it is that sometimes the tutors do not know how to put concepts in a way that students can understand. The tutors are very smart, but they can learn how to put things in simple language.

   In addition, students also mentioned that tutors did not always relate well to students. Other students mentioned having had tutors who were impatient and at times even condescending. In the words of two students:

   The tutor I had got easily frustrated when I didn't understand something. Math is not my strongest subject and I find it very challenging, sometimes it takes a few tries.

   Sometimes you may feel as if they are judging your understanding and how much you are able to take in.

Most valuable things about online tutoring

As with the in-person tutoring experiences, students were asked to identify what was most and least valuable about online tutoring. Three themes emerged from an analysis of what students found most valuable.

1. **Online tutoring was convenient and accessible.** The majority of the students responded that convenience, accessibility, not having to work around tutors' schedules, and having 24/7 access to resources were most valuable about online tutoring. Two students shared:

   The availability of online tutoring is great for people who don't have reliable transportation.

   It was convenient for me because of work and classes.

2. **Ability to go at their own pace.** The majority of students indicated utilizing some form of asynchronous tutoring. Overall, students liked that this modality allowed them to study at their own pace. One student stated:

   I can pause and replay videos if I don't fully understand a concept. Which is really nice.

   Another student added:

   Being able to learn at my own pace and use it when it was most convenient for me.

3. **Positive connections with online tutors.** Similarly to in-person tutoring, students felt they were able to connect with their tutors. In the words of one student:

   [Through online tutoring I] had the opportunity to not be shy and ask how many questions I wanted. [I had] no fear of being judged.

Least valuable things about online tutoring

Three common themes emerged across students' responses when it came to the things they found least valuable about online tutoring.

1. **Lack of engagement and connection they would get from in-person tutoring.** While many students appreciated qualities of asynchronous tutoring, some felt that connecting with a person was a missing factor. One student shared:

   It was less personal and I found it harder to connect the material to my work.

   A second student added:

   If I still didn't understand what I was supposed to be doing, there was no one there to walk me through in person.

2. **Technical issues.** Students indicated that a downside of online tutoring has to do with having to rely on technology. One student mentioned:

   If you have technical difficulties accessing the website and internet problems then it is useless and you must go to school to get tutoring.

3. **Difficulty communicating effectively via an online environment.** Some students cited having difficulty communicating their questions to tutors via email and not being able to understand the tutors' responses. In the words of two students:

   Sometimes demonstrations about certain topics were hard to explain [online] because [they are] better taught in person.

   Having to explain something difficult over email instead of in-person [can be a challenge].

V. Student Participation in NetTutor's Online Tutoring Services

Online Tutoring Usage

This section presents overall tutoring usage rates based on data provided by NetTutor, post-tutoring survey results including perceived impacts on student success in online courses from students and faculty.

Online tutoring services provided during the pilot consisted of three sets of services: (1) live one-on-one tutoring (Ask NetTutor), (2) essay/paper review (Paper Center) and (3) synchronous question submission (Question and Answer Center). In addition, promoting awareness of the online services being offered to students was necessary to encourage usage and therefore increase the chance for tutoring to make a difference in students' academic outcomes.

Students sought tutoring for English, psychology, mathematics, economics, philosophy, political science, history, sociology, and child development. English was the subject area most tutored; followed by psychology, mathematics, political science, economics, history, philosophy, child development and sociology. **Students in administration of justice and geography did not access tutoring services.**

There were 72 individual students from the eight pilot colleges who utilized NetTutor services. Overall, there were 154 sessions recorded and the total number of minutes that students spent interacting or utilizing NetTutor services was 3,276 minutes (55 hours). Eleven students utilized the majority of tutoring minutes (2,033 out of 3,276). The remaining 1,243 minutes were distributed among 61 students who attended sessions from 0.5 to 46 minutes in duration. The fact that 11 students used most of the tutoring minutes raises the question as to whether online tutoring was helpful to the remaining students. The inability of the RP Group evaluator to match survey and usage data for the spring 2015 pilot prevented further analysis of this finding.

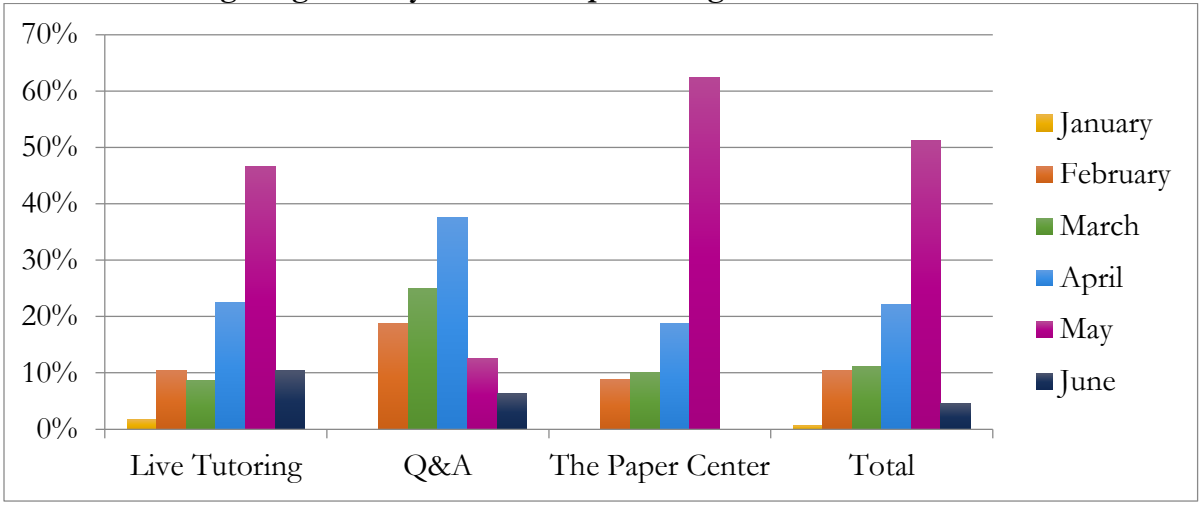
The Paper Center was most utilized by students followed by live tutoring. Out of the 154 total sessions, 51.9% (80) were from The Paper Center, 37.7% (58) were from Live Tutoring (Ask NetTutor), and 10.4% (16) were from the Question and Answer Center (Q&A). Table 13 demonstrates minutes of tutoring by month and usage type for the 72 students that used NetTutor. These students were enrolled in 15 out of the 24 online course sections who were offered as part of the pilot (see Appendix C for courses that had students utilize NetTutor).

Table 13 : Tutoring Usage Rates by Minutes for Spring 2015 Semester/Term*				
Month	Live Tutoring Minutes	Q&A Minutes	The Paper Center Minutes	Total Minutes
January	3.8			3.8
February	127.5	15.4	111.0	253.9
March	110.9	46.5	216.8	374.2
April	311.9	47.4	415.2	774.5
May	756.6	21.6	917.9	1,696.1
June	172.1	1.6		173.8
Total	**1,482.8**	**132.6**	**1,660.8**	**3,276.3**

* These usage rates come from students in 15 out of the 24 OEI courses in the study that utilized online tutoring services.

Usage of NetTutor services increased towards the end of the spring semester, peaking in May with the exception of the Question and Answer Center which peaked in April. Chart 1 depicts usage rate by month and peak usage for each type of online tutoring service.

Chart 1: Tutoring usage rate by month and peak usage



Post-Tutoring Survey

The goal of this survey was to understand how students learned about the online tutoring that was offered for their classes and their experiences with the online tutoring services. The survey was administered in the latter half of the spring 2015 semester by 21 of the 22 faculty across the eight pilot colleges taught that OEI online courses. A total of 171 out of 810 (21.1% response rate) students across six pilot colleges completed the survey (see Appendix B for the number of completed surveys by college and course).

Summary of Findings

Overall, most of the students, 137 out of 171 (80.1%), learned about online tutoring through an email from their instructors. Nearly three-quarters (72.5%) of the students who participated in the post-tutoring survey did not utilize the online tutoring services. When asked why, the most frequent response was that they felt they did not need tutoring (49.2%); about a third (33.1%) also preferred

face-to-face instead of online tutoring. Overall, students who utilized online tutoring had a positive experience accessing the tutoring services from within their class and with the help they received from their tutors. They enjoyed having easy access to help from home, as well as the turnaround time for receiving feedback within 48 hours. Many of the students feedback was focused on the help they received with their writing assignments – and that the tutors helped them improve in this area.

Detailed Findings

Students that did not Use NetTutor

One hundred and twenty four students (72.5%) out of 171 students who responded to the survey did not access online tutoring. When asked why, nearly half (49.2%) felt they did not need tutoring. One student shared:

> *[My instructor] did a wonderful job with notes/PowerPoint/ and assignments that I did not feel I needed [tutoring]. [The instructor] gave us the info to succeed.*

About a third (33.1%) indicated they preferred face-to-face tutoring instead of online tutoring. Table 14 shows additional reasons students did not use NetTutor.

Table 14: Reasons Students Did Not Use NetTutor

	Responses	Percentage
I did not need tutoring	61	49.2%
I prefer face-to-face tutoring	41	33.1%
I have had negative experiences with online tutoring in the past	5	4.0%
I did not have access to a computer	3	2.4%
Other	13	10.5%
Total	124	

Students who indicated "other" were asked to share why. Common responses provided by students were that they either did not have time in their schedules to fit in tutoring or they did not finish their written assignments in time to utilize the online tutoring services. While this is a small number, it is interesting to note these responses. In the words of one student:

> *I would have loved to [go to] tutoring. This class was difficult, but I was working full-time and taking other courses. I didn't have time left in my day.*

Another student shared:

> *I did not have my essay done in time to submit to NetTutor.*

Forty six (63.9%) out of the 72 students who used NetTutor in spring 2015 completed the post-tutoring survey. What follows is a description of the NetTutor services used by these 46 survey respondents, their perspectives on accessibility of NetTutor and their perceptions of their experience with online tutoring and the perceived impact they felt online tutoring had on their success in their course. Table 15 shows the type of NetTutor services used by this group of students. Nearly two-thirds (63.0%) of the students used the Live Tutor (Ask NetTutor) and more than half (54.3%) indicated they used the Paper Center; five out of 46 students used the Question and Answer Center.

Table 15: Type of Tutoring Service*		
	Responses	Percentage
Live Tutor (Ask NetTutor)	29	63.0%
The Paper Center	25	54.3%
Question and Answer Center	5	10.9%
Total	46	

* Check all that apply

Of the 46 students who used NetTutor, 30 (65.2%) indicated having used the Q&A Center and/or Paper Center, and receiving a response within 48 hours. Twelve students (26.1%) did not use either service; four (8.7%) skipped the question.

Accessibility of Tutoring Services

The majority students who used NetTutor felt that the services were easy to access and use. Of the 46 students who accessed services, 84.8% said they were easy to access, and 93.5% indicated that using the WorldWideWhiteboard was straightforward. Students also shared that accessing NetTutor was simple because there were many links directing them to the tutoring service. Table 16 shows the range of student answers regarding accessibility to tutoring services and use of the tutoring platform. The student who indicated the platform was not easy to use shared:

> *I had problems when submitting my paper in a PDF file because the file would change the words I italicized.*

Table 16: Accessibility of Tutoring Services (N=46)					
	Strongly Agree	Agree	Disagree	Strongly Disagree	Skipped
Accessing NetTutor from within my course was simple.	60.9%	23.9%	4.3%	0.0%	10.9%
The online tutoring platform was easy to use.	54.3%	39.1%	2.2%	0.0%	4.3%

Table 17 presents students' answers regarding whether they experienced any general or technical limitations using NetTutor or the WorldWideWhiteboard. Thirty (65.2%) out of 46 students responded that they did not encounter any limitations to using online tutoring. However, a combined 26.1% represented students' limitations using NetTutor in regards to the availability of online tutoring hours, students not knowing how to access online tutoring, limited access to computers on campus, and (lack of) comfort with new technology as limitations to using NetTutor. When asked specifically about technical-related limitations, 28 of the 46 students (60.9%) cited having none. A combined 21.7% represented students' technical limitations regarding difficulty with internet connections, user display, and the tutoring platform (limited interaction and/or confusing features). Two students who felt the services were available and accessible shared:

> *I could send my work right from my own computer, without making an appointment, driving to the tutor, etc. It was wonderful. Fast turnaround as well.*

> *The most helpful thing I found was getting help at home if I was struggling with something.*

A faculty member also shared feedback regarding ease of use provided by the students in her class:

> *Students also gave the feedback that the tutoring service was easy to use, which allayed their anxiety, as they thought the process would be complicated.*

Table 17: Limitations to Successfully Using Online Tutoring*		
	Count	Percent
General limitations		
None	30	65.2%
Availability of online tutoring hours	5	10.9%
Didn't know how to access online tutoring	3	6.5%
Level of comfort with new technology	2	4.3%
Limited availability of computers on campus	1	2.2%
Don't feel comfortable with online tutoring	1	2.2%
Didn't have a computer at home	0	0.0%
Limitations with Technology		
I had no technical issues	28	60.9%
I had difficulty maintaining a reliable internet connection	5	10.9%
There were issues with how things were displayed	2	4.3%
The tutoring program had limited interactive and or confusing features	2	4.3%
There were issues with the sound	1	2.2%
Other	0	0.0%
Total	46	

* These two questions allowed students to select more than one answer choice.

Students' Experiences with Tutors

Table 18 provides students' responses to a set of descriptive statements about their tutors and were prompted to rate their level of agreement with each statement. Overall, the majority of the students either strongly agreed or agreed that their tutors attributed positive characteristics, such as being a good listener, friendly, patient, courteous, and encouraging. Additionally, students also had high level of agreements with statements about their interactions with their tutors and their tutors' quality of service. Students indicated that their tutors were able to understand their questions, encouraged critical thinking, knowledgeable about the subject matter, suggested techniques to understand the materials, and taught them new skills.

Table 18: Students' Interactions with and Perceptions of Tutors (N=46)					
	Strongly Agree	Agree	Disagree	Strongly Disagree	Skipped
The tutor was a good listener	45.7%	47.8%	0.0%	0.0%	6.5%
The tutor was friendly	47.8%	43.5%	0.0%	0.0%	8.7%
The tutor was patient	43.5%	47.8%	0.0%	0.0%	8.7%
The tutor was courteous	47.8%	43.5%	0.0%	0.0%	8.7%
The tutor was encouraging	50.0%	41.3%	0.0%	0.0%	8.7%
The tutor tried to understand my problems/questions	45.7%	47.8%	0.0%	0.0%	6.5%
The tutor encouraged critical thinking	37.0%	50.0%	6.5%	0.0%	6.5%
The tutor was knowledgeable in my course's subject matter	41.3%	45.7%	0.0%	0.0%	13.0%
The tutor suggested techniques that helped me learn the material effectively	39.1%	47.8%	4.3%	0.0%	8.7%
The tutor taught me skills that I can apply to other courses	34.8%	47.8%	8.7%	0.0%	8.7%

Learning New Skills

Students were prompted to give specific examples (through open-ended questions) of techniques and skills they learned from their tutors. The majority of responses centered on an improved ability to write essays. Students mentioned a number of different skills and techniques they learned that helped them with their class assignments. Three students shared:

> *[I learned how to] use one argument per paragraph, and a strong thesis statement. Also using suggestions [on how to make my] ideas flow in order to keep the reader on track.*
>
> *I learned how to better catch punctuation and grammatical errors in my paper.*
>
> *[I learned how to] make an outline for my essays.*

Another student added that tutoring taught him/her skills to improve reading and reading comprehension:

> *[I learned that I should be] reading more and to be patient with my reading so I can fully understand the subject.*

In addition to discrete skills and techniques, students were also asked to share how tutors encouraged critical thinking. In the words of one student:

> *I learned some cognitive skills like questioning and having clear and logical organization in writing.*

A faculty member also shared comments she got from her students regarding students learning to use questions to help them think critically through issues:

> *Those who used the tutor were positive, and they said that they were able to answer some of their own questions simply by formulating questions about what they wanted from the tutors, which I thought was interesting.*

Another student added:

> *On a research paper [the tutor] told me to use critical thinking on my ideas so they can be backed up.*

STUDENT PERCEPTIONS REGARDING THE IMPACT OF TUTORING ON THEIR SUCCESS IN THEIR ONLINE COURSES

A number of students were able to describe how tutoring helped them be successful in their courses. Since the ability to match data was not possible, we do not have course completion data for these students, however, it is encouraging that they felt that tutoring was valuable for them. One student shared:

> *The tutor helped my success in the class by pointing out the weaknesses that I have in writing like grammar, verb agreement, citations, etc. By providing feedback, it really helps me a lot because I know where to pay attention in order to improve my writing.*

Another student mentioned:

> *I got an A on my research paper.*

A couple of students shared that while their overall grades may not have improved, they still felt tutoring will help them be successful. In their words:

> *Although I got a bad grade it helped me pay better attention to what I need to do for any next essay.*

> *The tutor helped me type my essays better and helped me get closer to getting a passing grade because I am struggling in my English class.*

Faculty Perceptions Regarding the Impact of Tutoring on Student Success

Faculty were asked to share whether they had observed any impact on students' critical thinking skills, writing skills, student learning, student engagement, student success, or other areas that might be attributed to students' usage of NetTutor. About half of the faculty who took the survey shared that they did not observe any impacts based on students using NetTutor. However, a few faculty were able to share examples of positive impacts on their students. One faculty member shared:

> *Since the course is a writing course, I felt that the comments the tutors made helped to improve their writing, in terms of formatting, expressing ideas, and even some grammar.*

The most encouraging comment came from a faculty member who compared course success rates between his/her online course section that received online tutoring services versus his/her other

sections of the same course that were not part of the OEI pilot. In the words of this faculty member:

> *Student success was higher for this course than my other online courses.*

While this observation is from only one faculty member, the hope is that the RP Group evaluator will be able to provide actual data on the impact of NetTutor on course success and completion rates in forthcoming evaluations.

VI. Recommendations, Conclusions, and Next Steps

The following recommendations are presented based on the findings presented in this report.

- Continue to find creative ways to **support faculty and provide them with additional customized resources to assist them in promoting the usage of the online tutoring services** such as a video for students that demonstrates a real student-tutor interaction.

- Develop an **outreach process to alert individual faculty members whose courses have low usage rates**.

- **Encourage faculty to make tutoring a class assignment**, provide extra credit and/or refer students not doing well in the course directly to tutoring in order to increase tutoring utilization rates.

- Develop a **systematic process to flag technical issues** with the online tutoring services to expedite them getting resolved.

- Re-examine the communication processes between OEI staff, faculty and other college staff participating in the OEI in order to **increase the effectiveness of information about OEI getting to faculty and staff in a timely manner.**

- **Simplify the process for faculty to customize and submit the Rules of Engagement (ROE) documentation.**

- **Identify a mechanism to enable data matching** between NetTutor usage reports, Canvas (the learning management system being adopted by the Online Education Initiative for OEI taught online courses), and the evaluation surveys

Conclusions and Next Steps

It is important to remember that the OEI online tutoring pilot was launched a few weeks into the spring 2015 semester/term. **While the findings are mixed when it comes to the implementation and usage rates of NetTutor overall, the OEI online tutoring pilot met its goal to gather information that would assist the OEI with program improvement efforts** that can be used to inform the scale up of online tutoring services to additional California community colleges.

It is natural to ask whether tutoring made a difference in academic outcomes. The fall 2015 report will continue to look at how the program was implemented and how students participated in online tutoring services, but it will also hopefully include information on potential academic outcomes that might be attributable to participation in online tutoring services. Additional collection of qualitative data may provide a better understanding of which online tutoring services made the biggest difference from students' experiences, however, it cannot answer the question which components mattered most for student outcomes. Formative feedback provided throughout the spring 2015 semester by the RP Group evaluator to OEI staff allowed for some of the items listed in the

recommendations section above to be addressed in fall 2015. Future evaluation reports will also examine how the OEI staff have addressed the recommendations.

Appendix A

Number of Pre-Tutoring Surveys Completed by College and Course	
College	**Count**
Barstow	**68**
Administration of Justice 110	*30*
Economics 201	*10*
Mathematics 110	*28*
Colombia	**54**
English 100	*17*
History 130	*24*
Psychology 110	*13*
Imperial Valley*	**78**
English 100	*49*
English 100	*29*
Mt. San Antonio**	**66**
Administration of Justice 110	*13*
Administration of Justice 110	*14*
Geography 120	*20*
Geography 120	*19*
Psychology 110	0
Ohlone	**116**
Economics 201	*40*
English 100	*25*
Psychology 110	*51*
Los Angeles Pierce	**114**
Child Development 100	*30*
Political Science 110	*57*
Sociology 110	*27*
Saddleback	**64**
English 100	*12*
Philosophy 100	*21*
Political Science 100	*31*
Victor Valley	**38**
Child Development 100	*12*
Philosophy 100	*26*
Total	**598**

* Imperial Valley had two different faculty teaching English 100 as part of the pilot.
** Mt. San Antonio College has two faculty that taught two different sections of the same course.

Appendix B

Number of Post-Tutoring Surveys Completed by College and Course	
College	Count
Barstow	**0**
Administration of Justice 110	*0*
Economics 201	*0*
Mathematics 110	*0*
Colombia	**9**
English 100	*9*
History 130	*0*
Psychology 110	*0*
Imperial Valley*	**32**
English 100	*22*
English 100	*10*
Mt. San Antonio*	**26**
Administration of Justice 110	*11*
Administration of Justice 110	*8*
Geography 120	*7*
Geography 120	*0*
Psychology 110	0
Ohlone	**34**
Economics 201	*19*
English 100	*15*
Psychology 110	*0*
Los Angeles Pierce	**55**
Child Development 100	*4*
Political Science 110	*44*
Sociology 110	*7*
Saddleback	**15**
English 100	*7*
Philosophy 100	*0*
Political Science 100	*8*
Victor Valley	**0**
Child Development 100	*0*
Philosophy 100	*0*
Total	**171**

* Imperial Valley had two different faculty teaching English 100 as part of the pilot.
** Mt. San Antonio College has two faculty that taught two different sections of the same course.

Appendix C

OEI Courses Across the Eight Pilot Colleges That Had Student Tutoring Usage
Barstow
Economics 201
Mathematics 110
Colombia
English 100
History 130
Psychology 110
Imperial Valley*
English 100
English 100
Mt. San Antonio**
Psychology 110
Ohlone
English 100
Los Angeles Pierce
Child Development 100
Political Science 110
Saddleback
English 100
Philosophy 100
Political Science 100
Victor Valley
Child Development 100

* Imperial Valley had two different faculty teaching English 100 as part of the pilot.
** Mt. San Antonio College has two faculty that taught two different sections of the same course.