Manhattanville in West Harlem Implementation Plan Report October 15, 2014 Submission

Declaration Reference and Key Data

Obligation Section Number: **5.07(c)(ix)** Obligation Page Number: **54** Obligation Trigger: **When Upper Level Students Matriculate** Obligation Start Date: **Beginning of 2012-2013 Academic Year** Obligation End Date: **End of 2036-2037 Academic Year (25 Years from Commencement)** Obligation Status: **In Compliance**

Obligation

Availability of Faculty. Commencing with the academic year in which the School matriculates upper level students eligible for competing in regional and national math, science and engineering competitions, CU shall endeavor in good faith to make its faculty from existing campuses available to upper level students from the School interested in competing in regional and national math, science and engineering competitions. As the Project Site is developed, CU shall endeavor in good faith to make its faculty from the Project Site available to upper level students at the School interested in competing in regional and national math, science and engineering competitions. Such support shall continue for a 25-year period from commencement.

Evidence of Compliance

1. Letter from Columbia Secondary School Principal

Columbia University's Implementation Plan and all supporting documentation are made available on the Community Services Webpage at <u>www.columbia.edu/communityservices</u>. For more information about communications and outreach efforts regarding the obligations, please refer to the Annual Community Outreach and Communications Report, which is also available on the Community Services Webpage.

Manhattanville in West Harlem Implementation Plan Report October 15, 2014 Submission

EOC Checklist for Obligation 5.07(c)(ix):
Please check to verify EOC items submitted for review.
1. Letter from Columbia Secondary School Principal
Monitor's Notes / Comments:
· · · · · · · · · · · · · · · · · · ·
Status: Please check to indicate the status of <u>Obligation 5.07(c)(ix)</u> :
In Compliance
In Progress
□ Not In Compliance
Not Triggered



A Public School, Community and University Partnership

Miriam Nightengale, Principal

Strength in Diversity Challenging Academics A Passion for Science and Reason

Memorandum

From:	Miriam Nightengale, Principal Mala
To:	, Office of the Provost, Columbia University
RE:	Columbia University Faculty/Columbia Secondary School Staff Interactions
Updated:	December 13, 2013

From September 13-December 13, 2013 the staff and students at Columbia Secondary School for Math, Science, and Engineering have benefitted from the following interactions/services from the faculty at Columbia University.

University Faculty/Staff Member	Department	CSS-MSE Staff Member	Project/Purpose	Time Period
	Provost's Office		Improving existing admissions structures for CSS-MSE students to enroll in the School of Continuing Education (SCE) through meetings with SCE and CSS staff. Continue providing outreach and introductions to University departments. Met with Deans and and and Director of the Undergraduate Writing Center, to strengthen relationships with departments in natural sciences and humanities.	Weekly, monthly, ongoing
			Serve on Friends of CSS, a non-profit organization whose aim is supporting the curricular and extracurricular activities of CSS.	Ongoing
	Office of Alumni and Development		Working with Friends of CSS and Principal to identify potential donors (individual and corporate), conduct donor research, and develop individualized cultivation plans for each. As part of this effort, advice is being sought regarding the creation of one or more advisory councils to serve as ongoing engagement vehicles for top corporate and individual donors. Also served as liaison to the School's major donor and consulted with the principal of CSS regarding donor stewardship and strategies to negotiate/facilitate major gifts. Beyond the Friends of CSS, has also worked with development colleagues at Columbia to identify individual and foundations prospects. Secured a \$100,000 donation to support and strengthen fundraising efforts.	Ongoing
	Provost's Office		Providing administrative coordination. Assisting with production of CSS-MSE 2014 graduation.	Ongoing
	Student and Administrative		Negotiated retail contribution from Barnes & Noble to decrease cost of textbooks required for Columbia classes.	Summer-Fall 2013

University Faculty/Staff Member	Department	CSS-MSE Staff Member	Project/Purpose	Time Period
	Services		The University Bookstore provided 45 students with their course books. Sixteen of the students were provided with rental textbooks, which will be due back at the end of Fall semester. The rental program saved CSS approximately 50% off of new books. The University Bookstore agreed to donate \$5,000 at retail towards the purchase of the books and provided a 20% discount to the balance of the purchases made, which were paid for by the Friends of CSS.	
			Negotiating a long term arrangement with the Columbia Bookstore to continue to provide an annual \$5,000 donation at retail at the start of the Fall semester.	Ongoing
			For the upcoming spring semester, the Bookstore has extended a 20% discount on purchases only.	Ongoing
	CU Teachers College		Member of ongoing principal network engaged in monthly meetings related to the work of school improvement and implementing the new Common Core Standards and teacher evaluation system.	Sep, Nov, Dec 2013
Neurobiology and Behavior Graduate Student	CUMC/ Neuroscience		Faculty from University's Medical Center made a presentation to CSS students in an elective course, Introduction to Psychology. The lecture, titled "Drugs and the Brain," provided an overview of how the human brain functions normally as well as an explanation of how different classes of drugs impact brain functioning. The visit culminated in an examination of real animal and human brains.	Fall 2013
	CU Business School		An elective entrepreneurship course created and taught by graduate students of Business School Professor Course goes through new venture creation process, exploring elements of required planning, honing professional skills. Students finish the course with a comprehensive portfolio.	Fall 2013
	CU School of Continuing Education		Facilitating registration of CSS students in CU classes, including outreach to CU staff, refining a system to vet courses to ensure that they are suitable for CSS students, creating and delivering an orientation for CSS student registration for Spring 2014 semester.	Fall 2013
	CU Law School		Participating in a panel discussion and follow-up meeting relating to what constitutes strong inquiry work in secondary school teacher team meetings and how they can be used to improve the quality of instruction and student work.	Nov-Dec 2013
Various Faculty	CU Teachers College		Taking graduate courses in administration and specific specializations to further work at CSS-MSE.	Fall 2013

COLUMBIA SECONDARY SCHOOL

for Math, Science, & Engineering

425 West 123rd Street, New York, NY 10027



A Public School, Community, and University Partnership Challenging Academics - A Passion for Reason and Knowledge - Strength in Diversity

Memorandum

Office of the Provost, Columbia University

From: Miriam Nightengale, Principal

RE: Columbia University Faculty/Columbia Secondary School Staff Interactions

Updated: March 11, 2014

To:

From December 13, 2013-March 14, 2014, the staff and students at Columbia Secondary School for Math, Science, and Engineering have benefitted from the following interactions/services from the faculty and staff at Columbia University.

University Faculty/Staff Member	Department	CSS-MSE Staff Member	Project/Purpose	Time Period
	CU Teachers College		Helping to design and implement research and action steps to reduce student anxiety around science and to encourage persistence through increasingly difficult materials. Current work includes interviewing students to determine attitudes around science and academic struggle and creating curricular materials to confront and alleviate anxiety and increase persistence.	Dec. 2013 – Ongoing
	Fu School of Engineering		Reviewing CSS Engineering focus and needs for sequence development. Discussing design of summer program to involve three CSS faculty members to increase engineering capacity and experience. Discussing possibility of CSS student participation in summer internship/workshop.	December 2013
	Fu School of engineering		Meeting to discuss development of engineering sequence at CSS and integration of "maker" principles. Review of integrated science curricula in order to inform science sequencing. Review of materials to support "maker" pedagogy and focusing engineering classes. March 25 date set for follow up meeting.	December 2013
	Provost's Office		Improving existing admissions structures for CSS-MSE students to enroll in the School of Continuing Education (SCE) through meetings with SCE and CSS staff. Continue providing outreach and introductions to University departments, especially the Biology, French, and Physics departments.	Weekly, monthly, ongoing
			Serve on Friends of CSS, a non-profit organization whose aim is supporting the curricular and extracurricular activities of CSS.	Ongoing

i.

	Office of Alumni and Development	Working with Friends of CSS and Principal to identify potential donors (individual and corporate), conduct donor research, and develop individualized cultivation plans for each. As part of this effort, advice is being sought regarding the creation of one or more advisory councils to serve as ongoing engagement vehicles for top corporate and individual donors. Also served as liaison to the School's major donor and consulted with the principal of CSS and Friends of CSS leadership regarding donor stewardship and strategies to negotiate/facilitate major gifts. Beyond the Friends of CSS, has also worked with development colleagues at Columbia to identify individual and foundations prospects. Technical assistance was provided on the following: research on donor management software, use of mail house services to print and mail fundraising appeals, development of case materials for fundraising efforts.	Ongoing
	Provost's Office	Providing administrative coordination. Assisting with production of CSS-MSE 2014 graduation.	Ongoing
	Student and Administrative Services	Negotiating a long term arrangement with the Columbia Bookstore to continue to provide an annual \$5,000 donation at retail at the start of the Fall semester.	Ongoing
		For the upcoming spring semester, the Bookstore has extended a 20% discount on purchases only.	January 2014
	CU Teachers College	Member of ongoing principal network engaged in monthly meetings related to the work of school improvement and implementing the new Common Core Standards and teacher evaluation system.	Ongoing
	CU School of Continuing Education	Facilitating registration of CSS students in CU classes, including outreach to CU staff, refining a system to vet courses to ensure that they are suitable for CSS students, creating and delivering an orientation for CSS student registration for Spring 2014 semester.	Ongoing
Various Faculty	CU Teachers College	Taking graduate courses in administration and specific specializations to further work at CSS-MSE.	Ongoing

COLUMBIA SECONDARY SCHOOL

for Math, Science, & Engineering

425 West 123rd Street, New York, NY 10027



A Public School, Community, and University Partnership Challenging Academics – A Passion for Reason and Knowledge – Strength in Diversity

	Memorandum
To:	, Office of the Provost, Columbia University
From:	Miriam Nightengale, Principal Mylal
RE:	Columbia University Faculty/Columbia Secondary School Staff Interactions
Updated:	June 13, 2014

From March 14, 2014-June 13, 2014, the staff and students at Columbia Secondary School for Math, Science, and Engineering have benefitted from the following interactions/services from the faculty and staff at Columbia University.

University Faculty/Staff Member	Department	CSS-MSE Staff Member	Project/Purpose	Time Period
	CU Teachers College		Helping to design and implement research and action steps to reduce student anxiety around science and to encourage persistence through increasingly difficult materials. Current work includes interviewing CSS students to determine attitudes around science and academic struggle and creating curricular materials to confront and alleviate anxiety and increase persistence.	Dec. 2013 – Ongoing
	Provost's Office		Improving existing admissions structures for CSS-MSE students to enroll in the University's School of Continuing Education (SCE) through meetings with SCE and CSS staff. Continue providing outreach and introductions to University departments, especially the Biology, French, and Physics departments.	Weekly, monthly, ongoing
	Office of Alumni and Development		Working with Principal Nightengale and Friends of Columbia Secondary School to increase financial support for CSS. Activities included: meeting with individual Friends of CSS board members to hone strategies for reaching out to their personal contacts for support for CSS; conducting prospect research on individuals corporations, and foundations; leading two meetings to support CSS parents in efforts to obtain foundation and corporate support; delivering a presentation about CSS to fundraising colleagues with the goal of uncovering potential prospects; securing the assistance of the Annual Fund Programs office to provide technical assistance for CSS's phoneathon; and engaging SIPA faculty and students to undertake a case study of CSS to develop collateral information for fundraising efforts.	Ongoing
	Provost's Office		Providing administrative coordination. Assisting with production of CSS-MSE 2014 graduation.	Ongoing
	Student and Administrative		Negotiating a long term arrangement with the Columbia Bookstore to continue to provide an annual \$5,000	Ongoing

University Faculty/Staff Member	Department	CSS-MSE Staff Member	Project/Purpose	Time Period
	Services		donation at retail at the start of the Fall semester.	
	CU Teachers College		Member of ongoing principal network engaged in monthly meetings related to the work of school improvement and implementing the new Common Core Standards and teacher evaluation system.	Ongoing
	CU School of Continuing Education		Facilitating registration of CSS students in CU classes, including outreach to CU staff, refining a system to vet courses to ensure that they are suitable for CSS students, creating and delivering an orientation for CSS student registration.	Ongoing
Various Faculty	CU Teachers College		Taking graduate courses in administration and specific specializations to further work at CSS-MSE.	Ongoing
	CU School of Engineering	Various CSS students	Mentored Robotics First team and participated in national competition in Ohio and NYC.	Feb 2014- May 2014
	CU Department of Mathematics	Various CSS Students	Facilitated math discussion group with CSS students with a goal to help students explore advanced mathematical topics and develop a peer discussion group at CSS.	May 2014 - Present
	CU School of Engineering	various CSS students,	Paired CSS students with graduate students from the School of Engineering. CSS students will assist CU graduates with summer research, and, potentially, in preparing research for publication.	May 2014 – Aug 2014
	CU Mathematics & Physics Departments		visited CSS to discuss String Theory and other aspects of Physics with students. invited students to the annual World Science Fair, which students attended on June 1.	May 7, 2014
	Earth Institute	CSS students	visited CSS to deliver a presentation around global challenges that pose threats to global economies, populations and environments.	May 8, 2014
	CU School of Mathematics		applied for and won the opportunity to host MOSAIC, an international art and math exhibition, to be hosted for the community at CSS in October 2014.	May 2014
	CU Mind, Brain, Behavior Institute		Met to discuss possible programs for implementation in after school middle school sequence at CSS. Also discussed opportunities for high school students to participate in Brainyac internships in Jan 2015.	June 10, 2014

COLUMBIA SECONDARY SCHOOL for Math, Science, & Engineering

425 West 123rd Street, New York, NY 10027 212-666-1278(p) 212-666-3805(f)

A Public School, Community, and University Partnership

Miriam Nightengale, Principal Lenice Nelson, Assistant Principal Dan Novak, Assistant Principal



Challenging Academics - A Passion for Reason and Knowledge - Strength in Diversity

Memorandum

To:	Office of the Provost, Columbia, University
From:	Office of the Provost, Columbia University Miriam Nightengale, Principal
Re:	Columbia University Faculty/Columbia Secondary School Staff Interactions
Updated:	September 22, 2014

From June 13, 2014 – September 22, 2014, the staff and students at Columbia Secondary School for Math, Science, and Engineering have benefitted from the following interactions/services from the faculty and staff at Columbia University.

University Faculty/Staff Member	Department	CSS-MSE Staff Member	Project/Purpose	Time Period
	SEAS		CSS students participated in summer research and design projects with the department of engineering through the "The Young Scholars Program," an existing program at Columbia that CSS aligned itself with to provide five students with scientific research and engineering design experience. The purpose of the program is to provide high school students with an integrated scientific research and engineering design experience. The students got hands-on lab experience in Columbia research laboratories, primarily mechanical engineering, by joining an existing project, and learned a variety of laboratory techniques and technologies from principal investigators and their graduate students. The students produced a detailed notebook cataloging laboratory work and engineering design efforts, their manufactured product, as well as a final poster and/or presentation.	August 2014
	Math Department		Columbia and CSS are working together to host a MoSAIC Festival that will showcase the connections between math and art. The purpose of the festival, which is held at several U.S. universities each year, is to promote awareness and interest in mathematics through its connection to the arts. The festival will include a variety of hands-on workshops, lectures, a mathematical art exhibit, short films, and an area for informal exchange. It is designed to be easily accessible by audiences high school age and up. MoSAIC is a joint venture between The Mathematical Sciences Research Institute and The Bridges Organization.	September- October
	Zuckerman Mind Brain and Behavior		CSS is working with Columbia's Zuckerman Mind Brain and Behavior Institute to include CSS students in its BRAINYAC Program, a program for students with an	Ongoing

University Faculty/Staff Member	Department	CSS-MSE Staff Member	Project/Purpose	Time Period
	Institute		interest in biomedical and specifically neuroscience research. Through the program, the students will learn basic neuroscience concepts and laboratory skills which will prepare them for a four-week research experience at a Columbia University Medical Campus (CUMC) neuroscience lab during the summer. The BRAINYAC program admits students with a stated interest in biomedical and neuroscience research who can commit to Saturday afternoon classes starting in January and the four week summer term (July- August). Starting in January, BRAINYAC students learn basic neuroscience concepts and laboratory skills that will prepare them for a four week mentored research experience in a CUMC neuroscience lab during the summer. Students receive a stipend for their	
	CU Teachers College		participation. Helping to design and implement research and action steps to reduce student anxiety around science and to encourage persistence through increasingly difficult materials. Current work includes interviewing CSS students to determine attitudes around science and academic struggle and creating curricular materials to confront and alleviate anxiety and increase persistence.	Dec. 2013 – Ongoing
	Office of the Provost		Improving existing admissions structures for CSS-MSE students to enroll in the University's School of Continuing Education (SCE) through meetings with SCE and CSS staff. Continue providing outreach and introductions to University departments.	Weekly, monthly, ongoing
	Office of Alumni and Development		Working with Principal Nightengale and board members of Friends of Columbia Secondary School (FOCSS) to increase financial support for CSS. Activities include: working with the Dean and staff of Columbia School of the Arts to consider a collaboration with CSS to be funded by the IMAX Corporation; working with a board member of FOCSS to develop a grant proposal to Dow Jones; identifying Columbia alumni who may be prospects for CSS; working with fundraising colleagues across Columbia to develop outreach plans for identified Columbia alumni; conducting foundation research; managing donor relations and gift negotiation for a principal gift donor; and working with SIPA faculty members and students to prepare a case of CSS.	Ongoing
	Office of the Provost CU Teachers College		Working with Vice Provost to promote CSS within Columbia. Member of ongoing principal network engaged in monthly meetings related to the work of school improvement and implementing the new Common Core Standards and teacher evaluation system.	Ongoing Ongoing
	CU School of Continuing Education		Facilitating registration of CSS students in CU classes, including outreach to CU staff, refining a system to vet courses to ensure that they are suitable for CSS	Ongoing

University Faculty/Staff Member	Department	CSS-MSE Staff Member	Project/Purpose	Time Period
			students, creating and delivering an orientation for CSS student registration.	
Various Faculty	CU Teachers College		Taking graduate courses in administration and specific specializations to further work at CSS-MSE.	Ongoing