










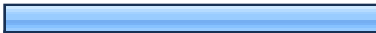




1. Please enter your unique ID number, which must be exactly the same if you took the 2011 Pre-program Survey. If you forgot or do not have a unique ID, please contact your Program Manager.

	Response Count
	50
answered question	50
skipped question	0

2. Please identify your program's institution in the drop down list.

		Response Percent	Response Count
Columbia University		34.0%	17
James Cook University		4.0%	2
National Jewish Hospital		6.0%	3
University of Notre Dame - RET (no QuarkNet)		18.0%	9
Penn State University		14.0%	7
Princeton University		6.0%	3
Stanford University		6.0%	3
UC Santa Barbara - MRSEC		6.0%	3
University of Texas Southwestern Medical		6.0%	3
	Other (please specify)		1
		answered question	50
		skipped question	0

3. Please identify your year in this program.

		Response Percent	Response Count
First Year		56.0%	28
Second Year		28.0%	14
Third Year		8.0%	4
Fourth Year		4.0%	2
Five or more Years		4.0%	2
		answered question	50
		skipped question	0

4. If your program's institution has more than one site, please identify the site at which you spent the majority of your time this summer.

	Response Count
	20
answered question	20
skipped question	30

5. Please indicate your research group's department (e.g.; physiology, chemistry, mechanical engineering).

	Response Count
	50
answered question	50
skipped question	0

6. Please indicate the area of research you were engaged in (e.g.; genetics, materials science, environmental science).

**Response
Count**

50

answered question

50

skipped question

0

7. To what extent, if any, did you engage in each of the following types of activities during your program participation?

	Great Extent	Moderate Extent	Small Extent	Not at All	N/A	Response Count
a. I observed research activities that others were doing	59.2% (29)	26.5% (13)	12.2% (6)	2.0% (1)	0.0% (0)	49
b. I attended lectures that presented information about current work in the field	44.9% (22)	30.6% (15)	18.4% (9)	6.1% (3)	0.0% (0)	49
c. I collaborated in ongoing research with regular staff from the organization	63.3% (31)	26.5% (13)	2.0% (1)	6.1% (3)	2.0% (1)	49
d. I designed and implemented my own research or investigation under supervision from a mentor	49.0% (24)	30.6% (15)	4.1% (2)	14.3% (7)	2.0% (1)	49
e. I assisted in the process of developing, modifying, or documenting applications of science, mathematics, or technology for my mentor/sponsor	51.0% (25)	32.7% (16)	8.2% (4)	8.2% (4)	0.0% (0)	49
f. I operated instruments, equipment, and other technologies	69.4% (34)	22.4% (11)	8.2% (4)	0.0% (0)	0.0% (0)	49
g. I participated in conducting research or collecting data in the lab or out in the field	77.6% (38)	6.1% (3)	6.1% (3)	6.1% (3)	4.1% (2)	49
h. I read academic literature or journal articles	59.2% (29)	22.4% (11)	16.3% (8)	0.0% (0)	2.0% (1)	49
i. I wrote about the work that I was doing and shared it with my mentor (s) or other professionals at the site	53.1% (26)	24.5% (12)	20.4% (10)	2.0% (1)	0.0% (0)	49
j. I wrote a paper that was suitable for submission to a professional journal	16.3% (8)	8.2% (4)	12.2% (6)	44.9% (22)	18.4% (9)	49
k. I gave a presentation on what I learned or an activity that I developed	67.3% (33)	22.4% (11)	8.2% (4)	2.0% (1)	0.0% (0)	49
l. I accessed information from the						

Internet that contributed to the work I was doing	61.2% (30)	26.5% (13)	10.2% (5)	2.0% (1)	0.0% (0)	49
	answered question					49
	skipped question					1

8. To what extent, if any, did you feel that you experienced each of the following types of learning as a result of your participation in the teacher research program?

	Great Extent	Moderate Extent	Small Extent	Not at All	N/A	Response Count
a. I gained greater understanding of the applications of science, mathematics, or technology in everyday life	77.6% (38)	18.4% (9)	4.1% (2)	0.0% (0)	0.0% (0)	49
b. I acquired greater understanding of the fundamental concepts in science or mathematics	63.3% (31)	32.7% (16)	4.1% (2)	0.0% (0)	0.0% (0)	49
c. I became familiar with new materials and equipment that I can use in my teaching	69.4% (34)	22.4% (11)	8.2% (4)	0.0% (0)	0.0% (0)	49
d. I learned about innovative ways to use standard materials and equipment in my field	55.1% (27)	32.7% (16)	10.2% (5)	0.0% (0)	2.0% (1)	49
e. I increased my knowledge of current issues in scientific or mathematical research	77.6% (38)	16.3% (8)	6.1% (3)	0.0% (0)	0.0% (0)	49
f. I gained a greater appreciation of the difficulties some students encounter when learning science or mathematics	63.3% (31)	18.4% (9)	18.4% (9)	0.0% (0)	0.0% (0)	49
g. I better understood how collaborative inquiry can be done successfully	44.9% (22)	30.6% (15)	20.4% (10)	2.0% (1)	2.0% (1)	49
h. I became more proficient at using the Internet for communicating with colleagues and accessing information that will be helpful in my teaching	38.8% (19)	24.5% (12)	28.6% (14)	4.1% (2)	4.1% (2)	49

i. I learned about magazines and professional journals that will be relevant to me as a teacher	24.5% (12)	44.9% (22)	16.3% (8)	12.2% (6)	2.0% (1)	49
j. I expanded my knowledge of how to use computers in my teaching	26.5% (13)	40.8% (20)	28.6% (14)	4.1% (2)	0.0% (0)	49
k. I increased my knowledge of careers that utilize science, mathematics, and/or technology	40.8% (20)	34.7% (17)	16.3% (8)	4.1% (2)	4.1% (2)	49
answered question						49
skipped question						1

9. Please indicate your level of satisfaction with your program experience in each of the following areas

	Excellent	Good	No Opinion	Poor	Very Poor	N/A	Response Count
a. The materials and information you received before you began the work experience	55.1% (27)	36.7% (18)	0.0% (0)	2.0% (1)	0.0% (0)	6.1% (3)	49
b. The orientation you received when you began the work experience	65.3% (32)	30.6% (15)	2.0% (1)	0.0% (0)	0.0% (0)	2.0% (1)	49
c. The expertise and helpfulness of the program management in answering questions and problem solving	75.5% (37)	22.4% (11)	2.0% (1)	0.0% (0)	0.0% (0)	0.0% (0)	49
d. Your relationship with your mentor	75.5% (37)	22.4% (11)	2.0% (1)	0.0% (0)	0.0% (0)	0.0% (0)	49
e. The opportunity to participate as a member of a team	73.5% (36)	20.4% (10)	2.0% (1)	4.1% (2)	0.0% (0)	0.0% (0)	49
f. The opportunity to ask questions of the staff at the worksite	85.7% (42)	10.2% (5)	0.0% (0)	2.0% (1)	0.0% (0)	2.0% (1)	49
g. The opportunity to interact and discuss issues with other employees at the site	77.6% (38)	14.3% (7)	6.1% (3)	0.0% (0)	0.0% (0)	2.0% (1)	49
h. The availability and quality of resources, materials, and equipment	77.6% (38)	20.4% (10)	0.0% (0)	2.0% (1)	0.0% (0)	0.0% (0)	49
Comments -- good or bad -- regarding your satisfaction in these areas							22
answered question							49
skipped question							1

10. Please rate the level of satisfaction your mentor met your expectations in each of the following areas

	Excellent	Good	No Opinion	Poor	Very Poor	N/A	Response Count
a. Your mentor's preparation for your arrival	65.3% (32)	26.5% (13)	0.0% (0)	6.1% (3)	2.0% (1)	0.0% (0)	49
b. Your mentor's understanding and support of the goals of the teacher research program	70.8% (34)	20.8% (10)	6.3% (3)	2.1% (1)	0.0% (0)	0.0% (0)	48
c. Your mentor's understanding of the roles and responsibilities of teachers in your field	61.2% (30)	26.5% (13)	10.2% (5)	2.0% (1)	0.0% (0)	0.0% (0)	49
d. Your mentor's interest in helping you develop a plan to improve education in science, mathematics, and/or technology	55.1% (27)	32.7% (16)	8.2% (4)	2.0% (1)	2.0% (1)	0.0% (0)	49
e. Your mentor's commitment to providing opportunities for you to learn and gain expertise in new areas	77.6% (38)	18.4% (9)	2.0% (1)	2.0% (1)	0.0% (0)	0.0% (0)	49
f. Your mentor's ability to communicate information and expectations clearly	75.5% (37)	20.4% (10)	0.0% (0)	2.0% (1)	2.0% (1)	0.0% (0)	49
Comments -- good or bad -- regarding your experience with your mentor							16
answered question							49
skipped question							1

11. Was your program experience successful in each of the following ways?

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	N/A	Response Count
a. It was responsive to your professional development needs	67.3% (33)	28.6% (14)	4.1% (2)	0.0% (0)	0.0% (0)	0.0% (0)	49
b. It was appropriate to your knowledge, skills, and interests	81.6% (40)	16.3% (8)	2.0% (1)	0.0% (0)	0.0% (0)	0.0% (0)	49
c. It provided opportunities to engage in inquiry/research activities that you will be able to adapt for classroom use	67.3% (33)	30.6% (15)	2.0% (1)	0.0% (0)	0.0% (0)	0.0% (0)	49
d. The job assignments were clearly defined	63.3% (31)	30.6% (15)	0.0% (0)	2.0% (1)	2.0% (1)	2.0% (1)	49
e. The work was enjoyable and stimulating	73.5% (36)	20.4% (10)	6.1% (3)	0.0% (0)	0.0% (0)	0.0% (0)	49
f. The scope of the project was appropriate for the time you were on site	63.3% (31)	26.5% (13)	4.1% (2)	4.1% (2)	2.0% (1)	0.0% (0)	49
Comments -- good or bad -- regarding the success (or not) of your experience							11
answered question							49
skipped question							1




12. Do you agree or disagree with each of the following statements concerning the impact of the program on you personally?

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	N/A	Response Count
a. It increased my confidence in myself as a teacher	67.3% (33)	22.4% (11)	10.2% (5)	0.0% (0)	0.0% (0)	0.0% (0)	49
b. It elevated my enthusiasm for teaching	73.5% (36)	24.5% (12)	0.0% (0)	2.0% (1)	0.0% (0)	0.0% (0)	49
c. It increased my interest in research and the ways that science, mathematics, or technology can be applied	79.6% (39)	12.2% (6)	8.2% (4)	0.0% (0)	0.0% (0)	0.0% (0)	49
d. It stimulated me to think about ways I can improve my teaching	73.5% (36)	26.5% (13)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	49
e. I believe I will be a more effective teacher	75.5% (37)	22.4% (11)	2.0% (1)	0.0% (0)	0.0% (0)	0.0% (0)	49
f. It increased my interest and ability in networking with teacher and other professionals	69.4% (34)	24.5% (12)	4.1% (2)	0.0% (0)	0.0% (0)	2.0% (1)	49
g. It increased my motivation to seek out other experimental professional development activities	69.4% (34)	28.6% (14)	2.0% (1)	0.0% (0)	0.0% (0)	0.0% (0)	49
h. It increased my commitment to learning and seeking new ideas on my own	73.5% (36)	24.5% (12)	2.0% (1)	0.0% (0)	0.0% (0)	0.0% (0)	49
i. It changed my career direction	12.2% (6)	12.2% (6)	38.8% (19)	16.3% (8)	14.3% (7)	6.1% (3)	49
Comments -- good or bad -- regarding the impact of the program							17
answered question							49
skipped question							1

13. In your opinion, what was the primary professional or personal benefit of the teacher research program experience?

	Response Count
	42
answered question	42
skipped question	8

14. Do you think your experience in the teacher research program will have an impact on student achievement in your class(es)?

	Response Percent	Response Count
Yes, it will have a major impact 	38.8%	19
Yes, it will have an impact 	55.1%	27
Yes, but very little 	6.1%	3
Probably not	0.0%	0
No, not at all	0.0%	0
answered question		49
skipped question		1

15. Regarding the potential impact of your experience in this program on student achievement, please elaborate the ways in which this program may, or may not, have such an impact.

	Response Count
	37
answered question	37
skipped question	13

16. As a professional development program for teachers, how would you rate the program in which you participated?

	Excellent	Very Good	Good	Fair	Poor	Very Poor	Response Count
Overall assessment of the program	89.8% (44)	6.1% (3)	4.1% (2)	0.0% (0)	0.0% (0)	0.0% (0)	49
	answered question						49
	skipped question						1

17. What is the likelihood that you would recommend this teacher research program to your colleagues?

	Definitely	Probably	Not Sure	Probably Not	Definitely Not	Response Count
Likelihood to recommend program	98.0% (48)	2.0% (1)	0.0% (0)	0.0% (0)	0.0% (0)	49
	answered question					49
	skipped question					1



18. What were the best things about this teacher research program?

	Response Count
	41
	answered question
	41
	skipped question
	9


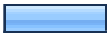


19. Were there any particular aspects of this teacher research experience that you feel should have been handled differently or could be improved?

	Response Count
	35
answered question	35
skipped question	15

20. What is your sex?

		Response Percent	Response Count
Male		44.7%	21
Female		55.3%	26
	answered question		47
	skipped question		3

21. Which best describes your primary ethnic group?

		Response Percent	Response Count
American Indian or Native Alaskan		0.0%	0
Asian or Pacific Islander		10.6%	5
Black, non-Hispanic		14.9%	7
Hispanic		8.5%	4
White, non-Hispanic		66.0%	31
Prefer not to state		0.0%	0
Other (please specify)		0.0%	0
answered question			47
skipped question			3

Page 1, Q1. Please enter your unique ID number, which must be exactly the same if you took the 2011 Pre-program Survey. If you forgot or do not have a unique ID, please contact your Program Manager.

1	UTSW6703	Sep 8, 2011 12:33 PM
2	CU0208	Sep 8, 2011 9:02 AM
3	CU0910	Sep 3, 2011 9:28 PM
4	CU0716	Sep 3, 2011 1:16 PM
5	UTSW5294	Aug 30, 2011 12:22 PM
6	CU0917	Aug 29, 2011 10:43 AM
7	CU0529	Aug 28, 2011 4:44 PM
8	cu0223	Aug 28, 2011 4:42 PM
9	CU1218	Aug 27, 2011 10:45 AM
10	CU0128	Aug 25, 2011 8:27 PM
11	CU1211	Aug 25, 2011 7:17 PM
12	CU1103	Aug 25, 2011 5:27 PM

Page 1, Q1. Please enter your unique ID number, which must be exactly the same if you took the 2011 Pre-program Survey. If you forgot or do not have a unique ID, please contact your Program Manager.

13	cu0806	Aug 24, 2011 7:34 PM
14	CU0423	Aug 24, 2011 5:54 PM
15	CU0507	Aug 24, 2011 12:27 AM
16	CU0109	Aug 23, 2011 11:29 PM
17	CU0213	Aug 23, 2011 9:19 PM
18	cu0754	Aug 23, 2011 8:33 PM
19	CU1123	Aug 22, 2011 6:31 PM
20	CU1119	Aug 21, 2011 9:56 PM
21	PU 0311	Aug 18, 2011 9:53 AM
22	CU1220	Aug 15, 2011 9:50 PM
23	SU1231	Aug 11, 2011 4:57 PM
24	SU3742	Aug 9, 2011 1:31 PM
25	SU8193	Aug 7, 2011 9:13 PM
26	PSU4953	Aug 6, 2011 8:03 AM
27	PSU2785	Aug 4, 2011 11:40 PM
28	PSU1149	Aug 4, 2011 10:16 PM
29	PU0403	Aug 4, 2011 8:28 PM
30	PU0102	Aug 4, 2011 10:32 AM
31	PSU2927	Aug 2, 2011 9:48 PM
32	363561410	Aug 2, 2011 2:47 PM
33	wenacuko	Aug 2, 2011 12:35 PM
34	901561833	Aug 2, 2011 12:18 AM
35	PSU1251	Aug 1, 2011 4:53 PM
36	PSU0212	Jul 31, 2011 7:47 AM
37	0810	Jul 30, 2011 11:11 PM
38	2011Teacher	Jul 29, 2011 2:15 PM
39	nj4299	Jul 29, 2011 1:41 PM
40	nj5034	Jul 29, 2011 1:37 PM

Page 1, Q1. Please enter your unique ID number, which must be exactly the same if you took the 2011 Pre-program Survey. If you forgot or do not have a unique ID, please contact your Program Manager.

41	nj2983	Jul 29, 2011 1:36 PM
42	316627801	Jul 29, 2011 12:34 PM
43	ND1461	Jul 29, 2011 12:25 PM
44	mwilso14	Jul 29, 2011 11:52 AM
45	ND4449	Jul 29, 2011 11:40 AM
46	nd2460	Jul 29, 2011 11:39 AM
47	PSU 4480	Jul 29, 2011 9:48 AM
48	UCBM1003	Jul 27, 2011 10:57 PM
49	UCBM1002	Jul 27, 2011 7:29 PM
50	UT5606	Jul 26, 2011 11:17 AM

Page 1, Q2. Please identify your program's institution in the drop down list.

1	UCBM	Jul 27, 2011 7:29 PM
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Page 1, Q4. If your program's institution has more than one site, please identify the site at which you spent the majority of your time this summer.

1	James Cook University, Townsville, Queensland, Australia	Sep 8, 2011 9:02 AM
2	Morningside Campus	Sep 3, 2011 9:28 PM
3	Columbia University Medical Center	Sep 3, 2011 1:16 PM
4	Columbia University Pupin Hall	Aug 28, 2011 4:42 PM
5	college of physicians and surgeons	Aug 27, 2011 10:45 AM
6	Lamont-Doherty Earth Observatory	Aug 25, 2011 8:27 PM
7	P&S Building	Aug 25, 2011 7:17 PM
8	Lamont-Doherty Earth Observatory	Aug 25, 2011 5:27 PM
9	Morningside campus	Aug 24, 2011 7:34 PM
10	Columbia University Morningside Campus	Aug 24, 2011 5:54 PM
11	Columbia Medical Center	Aug 24, 2011 12:27 AM

Page 1, Q4. If your program's institution has more than one site, please identify the site at which you spent the majority of your time this summer.

12	columbia university medical center	Aug 23, 2011 8:33 PM
13	Lamont Doherty Earth Observatory	Aug 21, 2011 9:56 PM
14	168th Campus	Aug 15, 2011 9:50 PM
15	http://www.bioe.psu.edu/NMR/	Aug 4, 2011 11:40 PM
16	PSU Main Campus	Aug 4, 2011 10:16 PM
17	Jordan Hall	Aug 2, 2011 12:35 PM
18	MRL	Jul 29, 2011 2:15 PM
19	Jordan Hall of Science	Jul 29, 2011 11:52 AM
20	MRSEC	Jul 29, 2011 9:48 AM

Page 1, Q5. Please indicate your research group's department (e.g.; physiology, chemistry, mechanical engineering).

1	Neurobiology/Immunology	Sep 8, 2011 12:33 PM
2	Physics	Sep 8, 2011 9:02 AM
3	Earth Science	Sep 3, 2011 9:28 PM
4	Immunology	Sep 3, 2011 1:16 PM
5	immunolgy/pediatrics	Aug 30, 2011 12:22 PM
6	Department of Applied Physics and Applied Mathematics	Aug 29, 2011 10:43 AM
7	MECHANICAL ENGINEERING	Aug 28, 2011 4:44 PM
8	astrophysics	Aug 28, 2011 4:42 PM
9	physiology	Aug 27, 2011 10:45 AM
10	Geochemistry	Aug 25, 2011 8:27 PM
11	Neurological Surgery	Aug 25, 2011 7:17 PM
12	Earth Science	Aug 25, 2011 5:27 PM
13	chemical engineering	Aug 24, 2011 7:34 PM
14	astrophysics	Aug 24, 2011 5:54 PM
15	Neurology	Aug 24, 2011 12:27 AM
16	biology	Aug 23, 2011 11:29 PM

Page 1, Q5. Please indicate your research group's department (e.g.; physiology, chemistry, mechanical engineering).

17	Environmental Health Science	Aug 23, 2011 9:19 PM
18	physiology	Aug 23, 2011 8:33 PM
19	Marine Biology	Aug 22, 2011 6:31 PM
20	Biology Paleoenvironment	Aug 21, 2011 9:56 PM
21	Chemical Engineering	Aug 18, 2011 9:53 AM
22	Surgery & Pathology	Aug 15, 2011 9:50 PM
23	Department of Medicine	Aug 11, 2011 4:57 PM
24	Pathology	Aug 9, 2011 1:31 PM
25	neurology	Aug 7, 2011 9:13 PM
26	Chemistry/Microbiology	Aug 6, 2011 8:03 AM
27	physics	Aug 4, 2011 11:40 PM
28	Chemestry	Aug 4, 2011 10:16 PM
29	Mechanical & Aerospace Engineering	Aug 4, 2011 8:28 PM
30	Department of Mechanical and Aerospace Engineering	Aug 4, 2011 10:32 AM
31	chemistry	Aug 2, 2011 9:48 PM
32	Electrical Engineering	Aug 2, 2011 2:47 PM
33	Molecular Biology	Aug 2, 2011 12:35 PM
34	engineering	Aug 2, 2011 12:18 AM
35	Chemisry	Aug 1, 2011 4:53 PM
36	chemistry	Jul 31, 2011 7:47 AM
37	Mathematics	Jul 30, 2011 11:11 PM
38	Chemistry/Biochemistry	Jul 29, 2011 2:15 PM
39	Immunology	Jul 29, 2011 1:41 PM
40	Immunology	Jul 29, 2011 1:37 PM
41	immunology	Jul 29, 2011 1:36 PM
42	electrical engineering	Jul 29, 2011 12:34 PM
43	Chemistry/Biochemistry	Jul 29, 2011 12:25 PM
44	Molecular Biology	Jul 29, 2011 11:52 AM

Page 1, Q5. Please indicate your research group's department (e.g.; physiology, chemistry, mechanical engineering).

45	Biology	Jul 29, 2011 11:40 AM
46	electrical engineering	Jul 29, 2011 11:39 AM
47	chemistry	Jul 29, 2011 9:48 AM
48	polymer chemistry (material science)	Jul 27, 2011 10:57 PM
49	materials	Jul 27, 2011 7:29 PM
50	microbiology/immunology	Jul 26, 2011 11:17 AM

Page 1, Q6. Please indicate the area of research you were engaged in (e.g.; genetics, materials science, environmental science).

1	Immunology/Genetics	Sep 8, 2011 12:33 PM
2	Physics and Marine Science	Sep 8, 2011 9:02 AM
3	Environmental Science	Sep 3, 2011 9:28 PM
4	Virology	Sep 3, 2011 1:16 PM
5	immunology	Aug 30, 2011 12:22 PM
6	Material Science: Nanotechnology	Aug 29, 2011 10:43 AM
7	NANOTECHNOLOGY	Aug 28, 2011 4:44 PM
8	astronomy	Aug 28, 2011 4:42 PM
9	Genetics	Aug 27, 2011 10:45 AM
10	Geochronology	Aug 25, 2011 8:27 PM
11	Stroke	Aug 25, 2011 7:17 PM
12	Geology	Aug 25, 2011 5:27 PM
13	atmospheric chemistry	Aug 24, 2011 7:34 PM
14	astrophysics	Aug 24, 2011 5:54 PM
15	Neuropathology	Aug 24, 2011 12:27 AM
16	nephrology	Aug 23, 2011 11:29 PM
17	Environmental Science - Radiation	Aug 23, 2011 9:19 PM
18	cystic fibrosis	Aug 23, 2011 8:33 PM
19	Marine Biology	Aug 22, 2011 6:31 PM

Page 1, Q6. Please indicate the area of research you were engaged in (e.g.; genetics, materials science, environmental science).

20	Dendrochronology	Aug 21, 2011 9:56 PM
21	Electrical Power Transmission Lines	Aug 18, 2011 9:53 AM
22	Pathology	Aug 15, 2011 9:50 PM
23	Hematology	Aug 11, 2011 4:57 PM
24	Immunology	Aug 9, 2011 1:31 PM
25	immunology	Aug 7, 2011 9:13 PM
26	Nanotech	Aug 6, 2011 8:03 AM
27	magnetic resonance imaging MRI	Aug 4, 2011 11:40 PM
28	Experimental Physics	Aug 4, 2011 10:16 PM
29	Historic Electromagnetism	Aug 4, 2011 8:28 PM
30	Materials Science	Aug 4, 2011 10:32 AM
31	physical chemistry engineering	Aug 2, 2011 9:48 PM
32	STEM project development-- nano technology	Aug 2, 2011 2:47 PM
33	MB-RET	Aug 2, 2011 12:35 PM
34	matlab	Aug 2, 2011 12:18 AM
35	nanoparticles	Aug 1, 2011 4:53 PM
36	instrumentation	Jul 31, 2011 7:47 AM
37	Number Theory	Jul 30, 2011 11:11 PM
38	biochemistry	Jul 29, 2011 2:15 PM
39	B and T cells of immune system	Jul 29, 2011 1:41 PM
40	Immunology	Jul 29, 2011 1:37 PM
41	immunology	Jul 29, 2011 1:36 PM
42	nano technology	Jul 29, 2011 12:34 PM
43	Chemistry	Jul 29, 2011 12:25 PM
44	Biology/Chemistry	Jul 29, 2011 11:52 AM
45	Biotechnology Workshop	Jul 29, 2011 11:40 AM
46	materials science	Jul 29, 2011 11:39 AM
47	materials science	Jul 29, 2011 9:48 AM

Page 1, Q6. Please indicate the area of research you were engaged in (e.g.; genetics, materials science, environmental science).

48	polymer for pharmaceutical	Jul 27, 2011 10:57 PM
49	materials	Jul 27, 2011 7:29 PM
50	immune system research	Jul 26, 2011 11:17 AM

Page 2, Q9. Please indicate your level of satisfaction with your program experience in each of the following areas

1	For my summer, my mentor and colleagues were an excellent fit. The research experience was marvelous.	Sep 8, 2011 12:37 PM
2	Amazing lab experience - highly suggest future placements in this lab.	Sep 8, 2011 9:02 AM
3	The initial "lab orientation" could be divided by discipline. The orientation was very relevant to my area of research, but seemed to be unnecessary for people who were going to work in engineering, earth science etc. Perhaps that day could be devoted to a tour of the other facilities for the people who were not working in molecular biology labs (eg. Lamont and Morningside campuses).	Sep 3, 2011 1:40 PM
4	Any negative comments are attributed to my laboratory experience, not the program meetings held on Monday. My laboratory consolidated two of their labs into one at the beginning of the summer. As a result of this move, research was halted and not able to begin immediately due to reconfiguring a smaller space and ventilation problems. It took almost 5 weeks for the laboratory to get up and running. In this time I aided the lab in clean-up and read articles pertaining to what experience I was supposed to be having and conducting at the time.	Aug 29, 2011 10:51 AM
5	Wonderful experience this summer, but want to take it to the next level next summer.	Aug 28, 2011 4:49 PM
6	My expectations were exceeded, and I am extremely rejuvenated for teaching in years to come.	Aug 27, 2011 10:50 AM
7	There is no comparison to this program. It truly is intensive, engaging, and a mind growth facilitator.	Aug 24, 2011 7:36 PM
8	My mentor was truly amazing. She (and her entire lab team) taught me so much about astrophysics as well as what real research looks like. This was an incredible experience.	Aug 24, 2011 5:58 PM
9	I had an incredible experience in my lab. All the people involved in my research where incredibly helpful. I loved my research team!!!	Aug 24, 2011 1:04 AM
10	I had a great experience. I had a super mentor who guided my work regularly	Aug 23, 2011 8:39 PM
11	Allow me to extend the highest level of satisfaction and thanks to the efforts of Dr. Jay Benziger, Dr. Dan Steinberg, and Mr. Eric Gauthier in the Chemical & Biological Engineering sector.	Aug 18, 2011 10:05 AM
12	This was a great experience - I appreciate your support in making this happen for me!	Aug 11, 2011 6:02 PM

Page 2, Q9. Please indicate your level of satisfaction with your program experience in each of the following areas

13	.	Aug 4, 2011 10:26 PM
14	I learned a fair amount in regards to how research was carried out covering topics that I currently teach in high school. My awe at the creativity of the early natural philosophers has increased immensely. I especially appreciate the fact that in doing research of historic physics topics, I was able to get up to speed and be a productive member of the research group quite quickly. Had the research in question been of a more current or modern nature, it would've taken me significantly longer to understand the problems and contribute to an appreciable degree.	Aug 4, 2011 8:34 PM
15	I had a second teacher whom I worked with and that made for an excellent summer. I had access to Notre Dame resources from the beginning which made for a great summer. Every RET is different but this was a very good one.	Aug 2, 2011 2:53 PM
16	The lesson plan requirement needs to more specific from the begining. Who the audience is should be highlighted; students, teachers or both. Examples of acceptable "lesson plans" should be presented early in the six week venture.	Jul 31, 2011 7:55 AM
17	This was an amazing experience! It revitalized my interest in science teaching and I look forward to incorporating what I have learned into my classroom.	Jul 29, 2011 2:22 PM
18	Overall, a really great experience!	Jul 29, 2011 1:44 PM
19	This was a wonderful learning experience which increased my biology acumen. I will definitely utilize this experience in my classroom to help my students with their science ability/understanding. Additionally, I will recommend this program to all of my science colleagues at George Washington High School.	Jul 29, 2011 1:43 PM
20	I felt the Tuesday/Thursday lunches were a nice touch, but really could have capitalized on the resources of ND faculty and associates to present some really neat stuff in the fields of education and science/math. The presentations about iGEM and Math and Science differences internationally were really good. The days we just sat there and ate in a lecture hall felt like something more could have been happening.	Jul 29, 2011 12:28 PM
21	none	Jul 29, 2011 9:49 AM
22	Equipment usage can be crowded at times	Jul 27, 2011 11:01 PM

Page 3, Q10. Please rate the level of satisfaction your mentor met your expectations in each of the following areas

1	Dr. Lip kin's lab was very fast paced, demanding and energizing. The work environment was very professional, and everyone in the lab was very helpful and welcoming.	Sep 3, 2011 3:23 PM
2	I was given a new mentor this summer and due to the laboratory move the chemicals needed for project were not ordered. My mentor and I had a long discussion about how to change the topic and allow it to have integrity as well as attribute to the group, however the chemicals were not ordered for this project either. I moved between 3 mentors this summer due to my mentors needing to	Aug 29, 2011 12:49 PM

Page 3, Q10. Please rate the level of satisfaction your mentor met your expectations in each of the following areas

	finish work, and stay accountable for other projects they had already begun. My last mentor at the end of the summer was very helpful and willing to show me steps in a new project, however time ran out to yield any conclusive evidence. I had no contact with my Professor throughout the entire summer, nor did he want to look at my paper or presentation.	
3	I always felt comfortable and always felt included.	Aug 28, 2011 5:01 PM
4	My mentor is not able to help me during the year but he put me on to another researcher whose work is reproducible in the classroom. That is very helpful to me.	Aug 27, 2011 11:05 AM
5	I love the atonomy my mentor gave me to develop and work on authentic research	Aug 24, 2011 7:42 PM
6	My mentor used to teach in a NYC public high school and is an alum of this program, so she very clearly understood the purpose of this program and what experiences/content from the research could be transferrable to my classroom.	Aug 24, 2011 6:25 PM
7	My mentor is very supportive and helpful in the lab. He is very patient in answering questions and providing feedbacks. Thanks Dr. Kleiman for taking the time to revise my poster and lab report.	Aug 23, 2011 10:14 PM
8	I had better than adequate support from my lab	Aug 23, 2011 8:44 PM
9	During my RET experience I was fortunate to share time with several mentors. Outstanding educators!	Aug 18, 2011 10:29 AM
10	Dr Littman has a clear passion for teaching and I was very happy to be working with him. Had we more time together, I would've enjoyed discussing pedagogy more.	Aug 4, 2011 8:44 PM
11	I have made a new educational colleague and friend that has committed to help me and others at my school improve our STEM program. This commment is in the form of; knowlege, materials and equipment.	Jul 31, 2011 8:13 AM
12	My mentor was very well prepared, organized and always willing to help! I couldn't have asked for a better mentor!	Jul 29, 2011 2:28 PM
13	My mentor improved during the second summer in making sure I was following the research and in letting me work independently.	Jul 29, 2011 1:48 PM
14	My mentor spends most of her time in the office and not at the lab bench. I feel my experience would have been more successful if we had been working side by side.	Jul 29, 2011 1:45 PM
15	I really appreciate the fact that an extra activity was provided by the mentor: gene sequencing. It took some effort on his part to set up this extra activity, but it was an excellent learning experience. We learned how to isolate DNA from a bacterial colony, perform PCR on it, and then use the sequence of the resulting DNA to find out what the probable species of the colony was. It was nice to actually do some procedures that I had only read about in the past.	Jul 29, 2011 12:01 PM
16	can be busy sometimes with meetings but always willing to give time to help and explain project	Jul 27, 2011 11:09 PM

Page 3, Q11. Was your program experience successful in each of the following ways?

1	A great balance between collaboration and lab work	Sep 2, 2011 3:23 PM
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Page 3, Q11. Was your program experience successful in each of the following ways?

2	I came away from the experience with lots of material to bring back to my students.	Aug 28, 2011 5:01 PM
3	In terms of professional development, I would only like to see more that was geared towards using our experiences in the lab to shape the structure of our classrooms. I really enjoyed having the 2nd year participants do a demo lesson, but I think it could be more powerful if the demo lesson was focused on a particular topic, such as "Formative Assessment" or "Open-Ended Inquiry" or "Integrating Literacy" . . . just something that would get us not only thinking about the lesson itself but how it fits into the bigger goals we have for our classroom.	Aug 24, 2011 6:25 PM
4	Although I was only able to participate in a small part of a big project, I've learned a lot about what it takes to be a good scientist. I enjoyed every moment of it and I am grateful to be part of the team. I really enjoyed working with everyone in my lab.	Aug 23, 2011 10:14 PM
5	Could have had a project with a wider scope if preparation for my arrival was better	Aug 22, 2011 6:37 PM
6	The Hydrogen Fuel Cell was the most successful and enjoyable program experience.	Aug 18, 2011 10:29 AM
7	The program has a time frame of 6 weeks. in my opinion it is not enough time to complete all the activities with out rushing.	Aug 4, 2011 10:38 PM
8	The Tuesday and Thursday lunches are not necessary, as the speaker that presented did not interest me. I don't believe the information that I received could be valualbe to me in my classroom.	Aug 2, 2011 12:53 PM
9	We discovered other areas we would have liked to further investigate, but did not have the time,	Aug 1, 2011 5:01 PM
10	Working in this lab has given me hope for teaching science again. The group is cohesive and supportive and that makes an excellent learning environment.	Jul 29, 2011 2:28 PM
11	none	Jul 29, 2011 9:50 AM

Page 3, Q12. Do you agree or disagree with each of the following statements concerning the impact of the program on you personally?

1	I feel much more energized and confident this school year than in the past. I not only have science techniques that I can bring back to my classroom, but I also have a new network of outstanding colleagues that I feel very comfortable reaching out to.	Sep 3, 2011 3:23 PM
2	This program has been incredibly influential in my life. I feel much more confident within my science discipline as well as able to understand and relate to current research methods and practices. This program has made me want more for myself in terms of higher education and a secondary masters or PhD.	Aug 29, 2011 12:49 PM
3	The program gave me the knowledge and the confidence to be a better astronomy teacher.	Aug 28, 2011 5:01 PM

Page 3, Q12. Do you agree or disagree with each of the following statements concerning the impact of the program on you personally?

4	I will never be the same kind of teacher again.It is a teacher changing program.	Aug 27, 2011 11:05 AM
5	I am more interested in becoming more of a leader in science education in my district and I hope to facilitate a staff development session on DDI	Aug 24, 2011 7:42 PM
6	As hard as I worked during these seven weeks, I feel rejuvenated and excited to go back into my classroom. This program reminded me how interesting science is and how important it is that I keep pushing myself to continue learning - not just about educational things, but also about science. I realize that I was starting to lose a bit of steam because I was so focused on pedagogy that I didn't make time to keep up with current events in science. One thing I would like to see next year is more of a sharing (maybe in small groups like we did to discuss how things were going in the lab) between program members of "best" practices (or practices we feel we need help improving) in our classroom. I'm working alongside some of the most passionate educators I've ever met, yet I don't really understand how they practice "good teaching" in their classroom. Though the 2nd year participants do share a lesson, it is a very tiny glimpse into one aspect of one day inside their classroom. I'd like to see more of an opportunity for us to discuss "How do you integrate science careers into your lessons? How do you structure activities in your class and why? How do you have students take notes? How do you use formative assessment in your classroom? What does your grading scheme look like? What types of assignments do you give and how often?" I mean, this might be just something that I feel would be beneficial - not everyone may agree with me. But I think having more of an opportunity to share best practices would create an even tighter network of participants.	Aug 24, 2011 6:25 PM
7	This research experience has broadened my scientific knowledge. I am confident to say that I can teach science better than when I started the program. Thank you Jay and Sam for generously providing all the resources and materials that I can bring to my students years to come.	Aug 23, 2011 10:14 PM
8	This program has changed me in multiple ways but most importantly it has made me aware of the challenges that my students face as learners.	Aug 23, 2011 8:44 PM
9	I will continue to teach, but with new scientific level of accomplishment.	Aug 18, 2011 10:29 AM
10	Outstanding program! -with unlimited resources and knowledge to help teachers improve and increase their success in the classroom.	Aug 15, 2011 10:14 PM
11	I have always been dedicated to improving as a teacher. I think all teachers should go back and experience the learning process as I have in this summer position. I also think that the support of other teachers in this program has been paramount to my processing this experience for a positive transfer to my classroom.	Aug 7, 2011 9:33 PM
12	Overall the experience was exiting and very satisfactory one. I believe this experience will improve my performance as a teacher and I will strongly recommend other teachers to participate on them.	Aug 4, 2011 10:38 PM
13	While I greatly enjoyed the research I did, I found that I am a teacher at heart before a scientist -- though I may tell my students the opposite.	Aug 4, 2011 8:44 PM
14	I now have more new ideas to try than the the coming school years has days to accomodate.	Jul 31, 2011 8:13 AM

Page 3, Q12. Do you agree or disagree with each of the following statements concerning the impact of the program on you personally?

15	Being a teacher has always been my passion, and I don't think it will change anytime soon.	Jul 29, 2011 2:28 PM
16	Again, I definitely think I will be a better teacher having done the program.	Jul 29, 2011 1:48 PM
17	none	Jul 29, 2011 9:50 AM

Page 3, Q13. In your opinion, what was the primary professional or personal benefit of the teacher research program experience?

1	The overall exposure to science	Sep 8, 2011 1:23 PM
2	The ability to bring back ideas and enthusiam about current scientific research to my students.	Sep 8, 2011 9:02 AM
3	I really enjoyed the opportunity to collaborate and network with others professionals, especially all of the talented teachers who shared so many great ideas!	Sep 3, 2011 9:51 PM
4	Reassuring myself that I want to stay in science education as a career. I have thought about switching into a science/medical profession but this program reassured me that what I enjoy most about science is teaching.	Sep 3, 2011 3:23 PM
5	Influencing my thought process on how I approach my classroom	Aug 29, 2011 12:49 PM
6	Working with experts in the field.	Aug 28, 2011 5:01 PM
7	WORKING WITH OTHER TEACHERS TO COLLABORATE ON IDEAS FOR THE CLASSROOM	Aug 28, 2011 4:48 PM
8	Confidence building,and feeling that I can impact science through my students correct education.	Aug 27, 2011 11:05 AM
9	Strengthening my ability as a science professional and teacher!	Aug 25, 2011 8:34 PM
10	Exposure to an authentic laboratory environment. Opportunities to collaborate with colleagures.	Aug 25, 2011 7:25 PM
11	You are able to stay current with on going research in several fields. This allows one to be able to contribute new and exciting ideas in the classroom	Aug 24, 2011 7:42 PM
12	Rejuvenating my desire to teach and my personal passion for science.	Aug 24, 2011 6:25 PM
13	to be surrounded by motivated teachers and share best practices, ideas, and opinions	Aug 23, 2011 11:36 PM
14	To be able to share our teaching experiences and the challenges that we face as teachers and gain support and resources outside the classrooms.	Aug 23, 2011 10:14 PM
15	Learning how to solve problems and how to pose good research questions	Aug 23, 2011 8:44 PM

Page 3, Q13. In your opinion, what was the primary professional or personal benefit of the teacher research program experience?

16	Increased expertise	Aug 22, 2011 6:37 PM
17	The greatest professional benefit was collaborating with other teachers at the meetings every Monday.	Aug 21, 2011 10:41 PM
18	You readily translate the learning experience into a teaching endeavor.	Aug 18, 2011 10:29 AM
19	confidence in the classroom	Aug 15, 2011 10:14 PM
20	Opportunity to be in the industry field.	Aug 11, 2011 6:06 PM
21	Experience doing the science I teach my students about.	Aug 9, 2011 1:37 PM
22	I think it is always good to remember what it is like to be at the bottom of the learning curve, as a teacher. I also think it was helpful for me to realize all that goes into the process of research, academic advancement at the graduate level and above, and to realize I love my job and do NOT want to leave teaching.	Aug 7, 2011 9:33 PM
23	I encourages you to bring new knowledge in the classroom	Aug 5, 2011 12:06 AM
24	The exposure of cutting edge research activities.	Aug 4, 2011 10:38 PM
25	Conducting research in the area of historic physics has led me to a deeper understanding of just how incredible the discoveries my predecessors made.	Aug 4, 2011 8:44 PM
26	Doing hands-on research in a discipline slightly different than my background	Aug 2, 2011 10:08 PM
27	Provides for space and time to do professional development of your own design within the scientific context of the research team	Aug 2, 2011 3:00 PM
28	In my opinion the research program afforded me the opportunity to preview kits that I would not otherwise had time to do.	Aug 2, 2011 12:53 PM
29	It gave me an opportunity to learn new material that I can bring back to the classroom.	Aug 2, 2011 12:24 AM
30	I learned how to conduct research which i will now incorporate into my classroom.	Aug 1, 2011 5:01 PM
31	Contacts who have offered world class resources; knowledge and materials.	Jul 31, 2011 8:13 AM
32	Learning how to work in a cooperative environment to tackle real word problems in a scientific manner.	Jul 29, 2011 2:28 PM
33	It greatly expanded my knowledge and experience in molecular biology.	Jul 29, 2011 1:51 PM
34	The primary benefit was actually doing the experiments and observing the process of science.	Jul 29, 2011 1:48 PM
35	Seeing the ins, outs and details of the whole process of science including failure, communication and the importance of experimental design.	Jul 29, 2011 1:45 PM
36	To participate in cutting edge research.	Jul 29, 2011 12:44 PM
37	It gave me the opportunity to experience research and will allow me to serve as	Jul 29, 2011 12:34 PM

Page 3, Q13. In your opinion, what was the primary professional or personal benefit of the teacher research program experience?

	a mentor to students who want to do research themselves.	
38	Having the opportunity to collaborate with fellow teachers that instruct the same/similar content. Being able to get their input and advice is invaluable.	Jul 29, 2011 12:01 PM
39	Learning new sorts of lab activities that I can offer my students.	Jul 29, 2011 12:01 PM
40	yes	Jul 29, 2011 9:50 AM
41	Able to understand current research and today's industrial problems to relate back in the classroom and make it applicable to students and why they needed to understand certain science concepts.	Jul 27, 2011 11:09 PM
42	The ability to be in a real lab setting and learn from professionals	Jul 26, 2011 11:17 AM

Page 3, Q15. Regarding the potential impact of your experience in this program on student achievement, please elaborate the ways in which this program may, or may not, have such an impact.

1	When I talk to my students about real applications of science, I have a better understanding of the overall process. I can better explain to my students how science actually occurs.	Sep 8, 2011 1:23 PM
2	I am hoping that my enthusiasm for current research will encourage some students to pursue science (and therefore strive to achieve higher grades). In addition, I believe that as I continue to learn from these research experiences, my ability to teach in creative and interesting ways will grow.	Sep 8, 2011 9:02 AM
3	I think this experience will impact my class in a positive manner. Students will look at analyzing data in a new way. They will visually see how weather data relate. The research and ideas I will be implementing in my classroom will show curriculum in a different way that may be more understandable to students.	Sep 3, 2011 9:51 PM
4	Because of this program, I want to expose my students to science at the university level. The majority of my students are from the Caribbean; however in my lab of over 30 people, the Caribbean was not represented. I want my students to become comfortable in a university setting well before they start college.	Sep 3, 2011 3:23 PM
5	This experience has impacted my teaching performance in multiple ways. I created an entire class called experimental design based on my experience as well as incorporated science presentations like we do at our conference in January. My students have learned and been able to benefit from Columbia's facilities as well as learn methods and techniques that I myself learned in my department.	Aug 29, 2011 12:49 PM
6	MORE STUDENT RECOGNITION OF AUTHENTIC SCIENCE.	Aug 28, 2011 4:48 PM
7	I intend to revamp my lab teaching skills to the extent that it will impact my students strongly. Examples of what I intend to do include adding technology, enriching labs, mentoring research with presentations, and conducting genetic research that mimics my summer experience. This should impact students	Aug 27, 2011 11:05 AM

Page 3, Q15. Regarding the potential impact of your experience in this program on student achievement, please elaborate the ways in which this program may, or may not, have such an impact.

	confidence in science and raise test scores.	
8	I believe it has opened my mind to better learning activities with the students, where they can do real science. This will increase their confidence and ability, which will assist in raising their Regents scores.	Aug 25, 2011 8:34 PM
9	I have new tools and ideas to take back to the classroom to enhance student engagement.	Aug 25, 2011 7:25 PM
10	New Lab ideas New Inquiry based teaching styles renewed enthusiasm transfered to students	Aug 24, 2011 7:42 PM
11	I believe that I will go back to my classroom excited to share my experiences with my students. I plan on integrating more opportunities to discuss careers in science, something that has been severely lacking in my curriculum. I will spend more time thoughtfully planning how to structure and scaffold research projects for my students. I will create more opportunities for students to do research, even if it is short investigation (such as going home and looking up some phenomena on the internet for homework). I also plan on doing more demos/activities that will get kids excited about science, which will hopefully increase their self-motivation in my classroom.	Aug 24, 2011 6:25 PM
12	allow me to teach them the skills to be better prepared in future science classes.	Aug 23, 2011 11:36 PM
13	One of my objectives as a fourth year teacher is to improve students' performance on the regents. The data driven instruction is a very helpful way to analyze and assess students' performance. Using the data collect, I can manipulate the lessons and place an emphasis on certain topics base on students' needs. Teachers in the program have motivated me to do more fun and creative things in my classrooms.	Aug 23, 2011 10:14 PM
14	The program has always given me new ideas on ways to bring things back to my classroom to explain concepts to my students in new ways.	Aug 22, 2011 6:37 PM
15	Increase student engagement.	Aug 21, 2011 10:41 PM
16	When you open your eyes to education and think about today. Think about the United States of America, think about the state of job creation, think about the state of mind we are in. Think about what our country might look like in 20 years. Now think about why and who and when and what its going to take to educate kids whyo have little or no interest in math & science. Based on my RET experience, the answer will be : The Advancement of Computer Technology. This will be the ivory, bronze, ebony tower that will stay afloat through every future challenge to education.	Aug 18, 2011 10:29 AM
17	I gained a tremendous amount from this program. I am looking forward to implementing new curriculum, professional development and research into my classroom. I spent my summer in a cancer laboratory and I would like to devote time this coming year to discuss cancer, research and diseases with my students. I feel that I can offer a richer science curriculum and my students will in turn have a deeper understanding and appreciation for science.	Aug 15, 2011 10:14 PM
18	I believe I can better talk to students, especially one-on-one, about opportunities in science.	Aug 11, 2011 6:06 PM

Page 3, Q15. Regarding the potential impact of your experience in this program on student achievement, please elaborate the ways in which this program may, or may not, have such an impact.

19	I have greater insight as to the skills one needs to be successful in research. I can help teach my students about these skills.	Aug 9, 2011 1:37 PM
20	I think these summers have reminded me of the patience a teacher needs for learners who are trying to get at the goal of a lesson. I have, too, been reminded of the patience a scientist needs to try an experiment, trouble shoot, problem solve, collect data, analyze the data, and trouble shoot and experiment again. These things, in tandem, are critical for a science teacher to have.	Aug 7, 2011 9:33 PM
21	During the program I was able to develop a presentation explaining "How MRI is possible". Also, design several worksheets and labs to put some of the math involve in the MRI into practice. In addition I like the idea of incorporating a lab notebook into my classroom so in that way all the labs and all the assign projects will have a palpable level of learning. In that notebook not only the students will write the data acquire but also their thoughts as the develop an experiment.	Aug 5, 2011 12:06 AM
22	In my case the students will get a positive impact directly from my research experience because I design four activities and laboratories that will improve their knowledge in specific aspects of their scientific curricula. They also will benefit indirectly with the knowledge that I acquired about the research and the academic activities that the university is performing.	Aug 4, 2011 10:38 PM
23	My research has allowed me to impart a personal touch to my students of the challenges faced by early scientists. My own high school physics lab seems infinitely more equipped than that of those whose work I aimed to replicate.	Aug 4, 2011 8:44 PM
24	It's going to provide me innovative ways to help students learn that are related to the research content I was involved with.	Aug 2, 2011 10:08 PM
25	Taking the team research model and implementing it in my educational setting has been rewarding for all concerned.	Aug 2, 2011 3:00 PM
26	I can refer back to the professional evaluations that we developed over the course of the workshop and use that information to benefit my class.	Aug 2, 2011 12:53 PM
27	My student will no longer just be conducting labs where they follow a procedure. They will develop their own procedure as they seek to answers or test their hypothesis.	Aug 1, 2011 5:01 PM
28	The plan is to have students work as teams in their Technology Education class to assemble colorimeters and, also to understand how the electrical components interact to quantify electromagnetic radiation in the visible light spectrum. When completed, students will utilize the instruments in science classes to test properties of various solutions. The data collected will then be correlated during math classes and entered into Excel spread sheets for graphing/analyst	Jul 31, 2011 8:13 AM
29	I hope to incorporate my experience into my classroom by: 1. Demonstrating and training in the scientific method 2. Collaboration to understand real world problems and 3. To boost interest in science and technology	Jul 29, 2011 2:28 PM
30	This program, in addition to expanding my knowledge and experience, will allow me to model research based science not only in my classroom but also when my students visit National Jewish Hospital .	Jul 29, 2011 1:51 PM
31	I think the main way this program will impact student achievement is by the	Jul 29, 2011 1:48 PM

Page 3, Q15. Regarding the potential impact of your experience in this program on student achievement, please elaborate the ways in which this program may, or may not, have such an impact.

	sheer enthusiasm for science that I will be able to relay. If I can get my students excited about science, I think the achievement will follow suit.	
32	I believe that the strengths I have built in this program will transfer to my students as I build scaffolding to help them understand the scientific process and scientific thinking. I can more clearly provide answers and feedback to my students after this experience.	Jul 29, 2011 1:45 PM
33	By incorporating what I have learned, I will spark an interest in the STEM fields.	Jul 29, 2011 12:44 PM
34	The only impact of my specific research opportunity I can envision is that it will allow me to relate my experiences to students. Also, I can now serve as a teacher associated with a research course my school offers so maybe i can encourage students in that direction now that I have a better knowledge of what research is and can be.	Jul 29, 2011 12:34 PM
35	This program helps me improve as a teacher. I complete the program better equipped both in method, content knowledge, and in material! All of these contribute to a more effective classroom and in turn provide students much better learning opportunities and chances for success.	Jul 29, 2011 12:01 PM
36	I have learned about new sorts of lab activities that I can use in the classroom. I think that this will increase student interest in science.	Jul 29, 2011 12:01 PM
37	This experience has allowed me to take a second look at my curriculum and modify more lessons into inquiry/investigative type that enable students to solve problems instead of following lab procedures. Which hopefully will make the class more interesting and enabled higher critical thinking.	Jul 27, 2011 11:09 PM

Page 3, Q18. What were the best things about this teacher research program?

1	The best part of the experience was the actual lab work. I loved the exposure to new lab techniques and ways of thinking.	Sep 8, 2011 1:23 PM
2	Having high school science teachers grow through the interaction with current researchers in their fields makes it an amazing program. The benefits are endless - increased interest and enthusiasm in science, increased knowledge, current and potential future interactions with researchers, and further opportunities that stem from these interactions, to name just a few.	Sep 8, 2011 9:02 AM
3	The best thing about this teacher program is the networking These teachers have terrific ideas and to hear about them gets me excited to go back to work with new ideas. Also, the people running the program, Jay Dubner and Sam Silverstein, make it enjoyable and fun!	Sep 3, 2011 9:51 PM
4	The balance between the collaborative, informative, social Monday sessions and the independent lab work. It was wonderful to have a team of people going through the same lab process to talk to on Monday sessions.	Sep 3, 2011 3:23 PM
5	Interaction with a wide variety of researchers.	Aug 30, 2011 12:24 PM

Page 3, Q18. What were the best things about this teacher research program?

6	Attention to detail. Jay Dubner is amazingly organized and motivated in aiding teacher development. Monday meetings allow development and collaborations that are invaluable. The teacher resource program does not stop when the summer ends, it continues to lend itself and allow for professional development in other organizations and opportunities. This teacher program exposed me to a part of science I had very little background or understanding, as well as allowed amazing contacts.	Aug 29, 2011 12:49 PM
7	Four days of research and one day of seminar.	Aug 28, 2011 5:01 PM
8	MONDAY PROFESSIONAL DEVELOPMENT MEETINGS WITH OTHER TEACHERS, DEVELOPING ACTION AND LESSON PLANS, WORKING WITH PROFESSORS IN THE EDUCATION FIELD TO INCORPORATE OUR SUMMER EXPERIENCE INTO OUR CLASSROOMS.	Aug 28, 2011 4:48 PM
9	The support from the coordinator, and the fellow teachers support. Why because the actual work was intense and without support my success would not be as good as it was.	Aug 27, 2011 11:05 AM
10	Working with a fantastic mentor, working in a real lab, meeting amazing teachers, and the amazing opportunities it brings. Mondays were awesome too- as well as the food!	Aug 25, 2011 8:34 PM
11	Opportunities to network and collaborate with other teachers. Further opportunities that come through association with the program. New ideas and information.	Aug 25, 2011 7:25 PM
12	The ability to be plunged deeply into a lab without strings attached was unparalleled. Meeting and working with other teachers in Monday meetings, and especially in the lab, was extraordinary.	Aug 25, 2011 5:44 PM
13	The Research experience and peer collaborative sessions	Aug 24, 2011 7:42 PM
14	1. AMAZING MENTOR! 2. Wonderful opportunity to learn something new (about science); wonderful opportunity to be the learner as opposed to the teacher. 3. Awesome colleagues and program coordinators. 4. Excellent opportunities to network.	Aug 24, 2011 6:25 PM
15	the diversity among the teachers in the program, jay dubner, the support network	Aug 23, 2011 11:36 PM
16	1. Meeting science teachers with different background and knowledge. 2. Sharing creative and fun teaching ideas and resources, 3. Be able to work with real scientists and use advanced science instruments. 4. Enhancement fund for classrooms.	Aug 23, 2011 10:14 PM
17	Doing research. Increasing content knowledge in areas of immunology, microbiology and molecular genetics.	Aug 23, 2011 8:44 PM
18	The opportunity to become an 'expert' in areas of science I might not otherwise.	Aug 22, 2011 6:37 PM
19	Quality of mentor scientists. Program Director Jay Dubner.	Aug 21, 2011 10:41 PM
20	What I have learned may be applicable to a future grant proposal.	Aug 18, 2011 10:29 AM
21	The lectures given by Columbia staff were very impressive and the demonstration lessons given by colleagues were very inspiring. Time to	Aug 15, 2011 10:14 PM

Page 3, Q18. What were the best things about this teacher research program?

	collaborate with other teachers was very helpful and the ideas that resulted from discussions were very valuable.	
22	Support for teachers, and the opportunity to work in the field.	Aug 11, 2011 6:06 PM
23	We actually get to do "real" science. It wonderful to spend a summer surrounded by adults.	Aug 9, 2011 1:37 PM
24	The reality of this program for me, is that without the balance of teacher camaraderie on Mondays and the skill of my mentor in developing an authentic project for me to both learn skills of research and honestly be working on her project for publication, I would not have felt the strength of experience. It was necessary for me to learn more about higher education, research, and the institution and the Mondays gave me an opportunity to do that AND a safe environment with colleagues like me who are dedicated to being better teachers.	Aug 7, 2011 9:33 PM
25	The way that we had a balance of activities that were focus to improve are jobs as better teachers (ex. seminars for the use of lab notebooking the incorporation of building colormeters, recommendations of books) and the experience to work in an innovative topic and gain hands on experience in real research.	Aug 5, 2011 12:06 AM
26	The refreshing opportunity to get out of the classroom and get exposure to different research programs as well as the academic activities that the university is realizing.	Aug 4, 2011 10:38 PM
27	Again, my research has made the developments of the early scientist that much more impressive. I only hope that I can impart the proper amount of awe on my own students.	Aug 4, 2011 8:44 PM
28	The chance to discover new phenomena that I can convey and discuss with my students and with my fellow science teachers.	Aug 2, 2011 10:08 PM
29	It gives you the reflective time to improve/rethink educational strategies for the coming year in both in class and extracurricular environments	Aug 2, 2011 3:00 PM
30	Our faculty and graduate mentors were incredibly welcoming, helpful and enthusiastic. They made this a rewarding experience.	Aug 1, 2011 5:01 PM
31	The enlightenment to the vast resources Penn State Universty has and is will to provide just for the asking!	Jul 31, 2011 8:13 AM
32	Working with a mentor who is extremely organized, approachable and helpful, attempting research outside of personal experience, and taking what you learned in the lab and applying it to your own classroom.	Jul 29, 2011 2:28 PM
33	I don't believe I could choose just one aspect of this program that is better than the rest. The many benefits of this program include but are not limited to: my expansion of knowledge and experience, the contacts made in the scientific community, bench work, etc.	Jul 29, 2011 1:51 PM
34	The best things about this program was doing the science and reigniting the passion I have for science.	Jul 29, 2011 1:48 PM
35	Completing my own full-scale research project Collaborating and sharing ideas with other teachers in the program.	Jul 29, 2011 1:45 PM

Page 3, Q18. What were the best things about this teacher research program?

36	Being treated as a peer with respect and being accepted into the group.	Jul 29, 2011 12:44 PM
37	The opportunity to test the products that are available to help instruct content. Being able to do this while getting feedback from respected/knowledgeable colleagues is a tremendous assist.	Jul 29, 2011 12:01 PM
38	Ability to learn about and perform new labs. Ability to learn how some research techniques are done (gene sequencing). Ability to network with other teachers.	Jul 29, 2011 12:01 PM
39	I would like to do another summer	Jul 29, 2011 9:50 AM
40	Collaborating with scientists, graduate students and other teachers to learn about their projects. Also we get time during the second summer to reflect upon our experience and develop a curriculum for it.	Jul 27, 2011 11:09 PM
41	The best thing about this research program is the networking and knowledge of the available resources in the teaching community. I really enjoyed being in the lab but prefer my classroom!	Jul 26, 2011 11:17 AM

Page 3, Q19. Were there any particular aspects of this teacher research experience that you feel should have been handled differently or could be improved?

1	The nature of the poster and presentation make the last few weeks very hectic and stressful. Unfortunately, I think both are integral the program and the experience.	Sep 8, 2011 1:23 PM
2	No. This third summer was incredible not only in location, but in my lab placement.	Sep 8, 2011 9:02 AM
3	I would have enjoyed seeing a demo lesson from the Singapore teacher. It would be interesting to see ideas from across the globe. If the program ever expanded, I think it would be great to separate into groups of high school teachers, middle school teachers and elementary(3 separate programs). This would expand the networking to people who can relate to your teaching situation. For future summers, I would love for the alumni to get a schedule of demo lessons being done. I know alumni get invited to lectures, but I would love to come back to see demo lessons to continue getting various ideas.	Sep 3, 2011 9:51 PM
4	Perhaps we caught her on a a bad day, but the woman who ran our lab orientation (sorry I can't remember her name!) was visibly frustrated/irritated by us. There was a lot of information to get through, but she snapped on a few occasions when a seemingly "obvious" question was asked. It was not a big deal in the scheme of the program, but since the program is run so beautifully, it's the only criticism I have!	Sep 3, 2011 3:23 PM
5	Jay responded very well when I expressed hesitations about re-entering my laboratory this summer 2011. I felt that their would be very few people from my group present and that I would not be able to collaborate with anyone. My Professor reassured that my hesitations would not be present and asked me to stay with the group. After the meeting with my Professor I did not hear or talk to him the rest of the summer, nor did he inquire if I was able to conduct or produce any research. I wish my Professor would have been more realistic about how	Aug 29, 2011 12:49 PM

Page 3, Q19. Were there any particular aspects of this teacher research experience that you feel should have been handled differently or could be improved?

	moving into a new laboratory would impact the incredibly short amount of time I had for this summers research.	
6	I cannot think of one.	Aug 28, 2011 5:01 PM
7	NO.	Aug 28, 2011 4:48 PM
8	Well the poster was very difficult for me.Maybe teachers could choose between a poster and an oral presentation each year, since some people are strong in one and weak in the other.	Aug 27, 2011 11:05 AM
9	Nope!	Aug 25, 2011 8:34 PM
10	Introduction to lab mentor and planning of project prior to the start of the program.	Aug 25, 2011 7:25 PM
11	This may sound nitpicky but, while there is a wonderful value to have scientists present their research to us, the following question and answer session should only go on for 10-15 minutes at maximum. And that's the worst I can say about this program.	Aug 25, 2011 5:44 PM
12	I think there should be a component which requires participants to present at various science related events around metro area and beyond	Aug 24, 2011 7:42 PM
13	See comments for Question 12.	Aug 24, 2011 6:25 PM
14	The mentors should get a program calendar to keep them up-to-date with the program. My mentor doesn't seem to remember that I would be in seminars on Mondays so I had to constantly remind him.	Aug 23, 2011 10:14 PM
15	None	Aug 23, 2011 8:44 PM
16	I really liked demo lessons. It would be great to invite alumni to come back and present demo lessons for the teachers.	Aug 21, 2011 10:41 PM
17	Personally, I was not please with my research presentation. I lost clarity and failed to bring explanations into focus. It was not the best of days for me when my competitive edge wavered.	Aug 18, 2011 10:29 AM
18	I feel that the STEM program lectures were not very beneficial to the program nor to professional development.	Aug 15, 2011 10:14 PM
19	Not sure...	Aug 11, 2011 6:06 PM
20	Well, in the beginning of last summer, I had to do all the safety training before I began. That was irritating, as I was still teaching and felt it really should have been part of the summer job. Otherwise, there is absolutely nothing I would change. This has been a great experience!	Aug 7, 2011 9:33 PM
21	The length of the program should be longer or to have a possible second year to continue the research we starter. Six weeks are not enough.	Aug 5, 2011 12:06 AM
22	Maybe a longer period of time or a commitment of a two year program.	Aug 4, 2011 10:38 PM
23	Everything on my end seemed to work pretty well. I have no complaints.	Aug 4, 2011 8:44 PM

Page 3, Q19. Were there any particular aspects of this teacher research experience that you feel should have been handled differently or could be improved?

24	Maybe to reduce the number of seminars or make some of them optional.	Aug 2, 2011 10:08 PM
25	satisfied with the development over the summer	Aug 2, 2011 3:00 PM
26	Show examples of what the required lesson plans should contain. Day one or two show examples of acceptable results not just templates. The words "lesson plans" means many different things base on your school.	Jul 31, 2011 8:13 AM
27	Nope.	Jul 29, 2011 2:28 PM
28	No	Jul 29, 2011 1:51 PM
29	No.	Jul 29, 2011 1:48 PM
30	NA	Jul 29, 2011 1:45 PM
31	None	Jul 29, 2011 12:44 PM
32	I do not believe so, the program has been improved and refined each year. Becomes more helpful and beneficial over time.	Jul 29, 2011 12:01 PM
33	none	Jul 29, 2011 9:50 AM
34	I think the program can be extended into 7 weeks to enable more lab time.	Jul 27, 2011 11:09 PM
35	no	Jul 26, 2011 11:17 AM