

**2005-2007 SURE II Survey**  
**A Collaborative Project funded by HHMI**  
**Summary for College of Wooster**

	Wooster Cohort			Aggregate						
	2005	2006	2007	2005		Colleges (Carnegie Classification)	2006		2007	
				Overall	Overall		Overall	Overall	Overall	Overall
<b>Institutional Information</b>										
Wooster students in HHMI Program	15	18	19							
Wooster students completing SURE II Survey	15	17	15	830	470	1211	391	1324		
<b>Sources of funding</b>										
HHMI	15	17	15	56.50%		57.3%	35.8%		37.2%	
NSF				8.40%		12.3%	12.2%		16.3%	
NIH				3.60%		4.5%	0.8%		3.7%	
Faculty grant				4.00%		3.4%	5.4%		3.2%	
College or University Funding				15.50%		11.6%	24.9%		12.0%	
ASPET				0.60%		0.7%	0.0%		0.3%	
TIM				0.00%		0.2%	2.2%		1.1%	
Other				11.30%		10.1%	18.7%		26.2%	
<b>Demographics</b>										
<b>Sex</b>										
Male	4	8	5	40%	41.0%	39.0%	37.0%		44.0%	
Female	10	9	9	60%	59.0%	62.0%	63.0%		56.0%	
<b>Ethnicity</b>										
African American		1	1	6.3%	4.4%	7.2%	2.9%		4.9%	
Asian American				12.5%	9.3%	17.3%	10.4%		12.2%	
Caucasian	11	13	12	62.5%	70.4%	59.4%	71.9%		69.5%	
Hispanic				4.9%	2.7%	3.9%	1.6%		4.3%	
Native American				0.9%	0.9%	0.9%	0.3%		1.0%	
Foreign National	3	2	1	6.7%	6.6%	5.1%	7.5%		3.0%	
Multiracial				2.4%	3.8%	3.6%	4.0%		2.9%	
Other				3.7%	2.0%	2.7%	1.3%		2.3%	

	Wooster Cohort			Aggregate						
	2005	2006	2007	2005		2006			2007	
				Overall	Overall	Colleges (Carnegie Classification)	Overall	Overall	Colleges (Carnegie Classification)	Overall
<b>Year of Graduation</b>										
2005				2.2%	0.6%	0.8%	0.0%	0.5%		
2006	4			43.2%	2.8%	5.2%	0.0%	0.0%		
2007	5	7		33.0%	42.0%	41.0%	3.4%	5.5%		
2008	6	4	6	16.4%	37.5%	35.0%	43.6%	41.0%		
2009		6	4	5.0%	16.2%	16.6%	37.9%	34.6%		
2010			5		0.2%	0.9%	14.7%	16.2%		
2011					0.4%	0.3%	5.0%	0.8%		
2012					0.2%	0.2%	0.0%	0.2%		
Other				<1%						

### Student Researcher Information

<b>Academic Major</b>										
Biology	5	3	3	41.5%	24.7%	41.3%	25.6%	30.8%		
Chemistry	2	3	3	13.7%	21.2%	12.0%	17.1%	11.1%		
Physics				3.8%	6.6%	3.9%	10.6%	9.3%		
Earth and Planetary Science				1.1%	3.9%	1.9%	2.3%	1.5%		
Mathematics			2	4.3%	4.8%	2.9%	7.8%	4.4%		
Computer Science				0.6%	3.3%	2.2%	2.3%	3.2%		
Biochemistry	6	8	4	14.2%	14.0%	11.8%	10.6%	11.6%		
Bioinformatics				0.0%	0.0%	0.3%	0.0%	0.3%		
Neurobiology	1	1		5.2%	5.3%	5.2%	6.5%	4.0%		
Engineering				5.7%	4.6%	8.4%	3.9%	14.2%		
Education				0.1%	0.0%	0.2%	0.0%	0.2%		
Other Social Science	1	1	1	5.7%	7.2%	4.2%	6.2%	3.2%		
Other Humanities			1		1.5%	1.6%	1.8%	1.0%		
Other Natural Science				0.6%	1.5%	1.6%	3.6%	2.6%		
Other				1.6%	1.3%	2.6%	1.8%	2.9%		
Undecided				1.5%						

	Wooster Cohort			Aggregate						
	2005	2006	2007	2005		2006			2007	
				Overall	Overall	Colleges (Carnegie Classification)	Overall	Overall	Colleges (Carnegie Classification)	Overall
<b>Prior Experience</b>										
None	9	10	9	42.9%	45.0%	40.7%	44.8%	42.1%		
Academic Semester	2	1	2	11.3%	11.3%	12.6%	13.0%	10.8%		
Multiple Semesters	2			9.8%	8.8%	12.6%	6.4%	10.7%		
Summer		2	2	8.5%	11.1%	9.3%	12.0%	12.0%		
Academic Semester and Summer		3	1	12.3%	12.0%	12.6%	11.8%	11.0%		
Several Experiences	2	1	1	15.2%	11.8%	12.2%	12.0%	13.3%		
<b>Postgraduate plans</b>										
Ph.D. in biology field	1	1	3	22.4%	15.4%	18.8%	16.8%	17.2%		
Ph.D. in physical science	1		3	12.2%	17.4%	10.8%	22.2%	19.7%		
MA in life sciences	1	1	1	2.8%	2.9%	3.1%	3.8%	3.1%		
MA in physical sciences	1	1		2.9%	7.9%	4.9%	4.1%	7.1%		
MA or Ph.D. not in science				3.1%	4.4%	2.8%	4.1%	2.2%		
Medical degree	3	7	4	20.5%	20.7%	26.1%	11.6%	17.8%		
M.D./Ph.D.	3	1		15.6%	8.6%	12.8%	9.5%	12.1%		
Other health professions	5	2	1	4.3%	4.8%	5.0%	4.3%	4.6%		
Professional degree such as law			1	1.6%	0.4%	1.2%	2.2%	1.9%		
Teaching certification				0.8%	0.9%	0.5%	1.6%	0.7%		
Peace Corps or similar				3.4%	2.6%	2.6%	3.8%	2.4%		
Work first then school		3	1	9.2%	11.5%	9.8%	14.1%	8.6%		
Science career with no additional school			1	0.8%	1.8%	1.1%	1.4%	2.1%		
Nonscience career with no additional school				0.6%	0.7%	0.4%	0.8%	0.5%		

	Wooster Cohort			Aggregate							
	2005	2006	2007	2005		Colleges (Carnegie Classification)	2006		Colleges (Carnegie Classification)	2007	
				Overall	Overall		Overall	Overall		Overall	Overall

### Plans before project started

I had not considered post-undergraduate education	1			5.6%	8.3%		6.5%		7.0%	5.6%
I planned not to pursue education				2.0%	2.7%		2.0%		3.2%	3.7%
Masters in science field	2	2	5	10.4%	14.1%		10.8%		14.6%	14.3%
Ph.D. in science field	5	4	3	39.9%	35.0%		34.1%		43.5%	40.6%
Masters in nonscience field			1	1.6%	0.9%		1.2%		3.2%	2.2%
Ph.D. in nonscience field			1	1.4%	4.0%		2.4%		1.9%	0.9%
Medical degree	7	10	4	35.8%	33.5%		41.1%		24.1%	30.3%
Law or professional				3.3%	1.6%		1.9%		2.4%	2.3%

### Plans after project

I have not considered options for education				2.7%	1.9%		1.5%		3.7%	2.5%
I now plan not to pursue education				1.3%	1.2%		1.2%		2.8%	2.5%
Now plan Masters in science	4	2	3	9.3%	13.9%		11.8%		13.8%	14.3%
Now plan Ph.D. in science	3	4	6	47.2%	42.9%		41.0%		48.7%	46.4%
Now plan Masters in nonscience			1	2.5%	1.9%		1.6%		3.7%	2.1%
Now plan Ph.D. in nonscience				2.2%	4.6%		2.8%		3.4%	1.6%
Medical degree	8	10	5	32.0%	32.5%		38.3%		21.4%	28.4%
Law or professional				2.7%	1.2%		1.9%		2.5%	2.2%

	Wooster Cohort			Aggregate								
	2005	2006	2007	2005		Colleges (Carnegie Classification)	2006		Colleges (Carnegie Classification)	2007		
				Overall	Overall		Overall	Overall		Overall	Overall	
<b>Describe work environment</b>												
I work individually	5	6	1		23.1%		21.2%		22.6%		23.8%	29.5%
Other undergrad students have similar but independent projects	4	8	7		31.9%		51.7%		33.8%		44.1%	25.7%
Graduate students have similar but independent projects	1		2		14.5%		2.8%		13.8%		2.1%	14.3%
Both Undergrad and grad	1	1			12.6%		4.5%		11.6%		3.4%	10.9%
I work with undergrads on a single project	4	2	4		11.3%		17.7%		12.3%		20.6%	11.6%
I work with grads on a single project			1		4.0%		1.1%		3.2%		2.3%	4.9%
I work with both					2.6%		0.9%		2.7%		3.7%	3.0%
<b>Role in the project if work with others</b>												
	<b>n=</b>				426		598		548			
We are equal partners	3	4	3		81.70%		83.1%		85.3%		80.7%	
I am a peer mentor	2	3	3		8.90%		10.4%		10.8%		12.6%	
Peer mentor within group, but it is not me.	4	5	4		9.40%		6.5%		3.9%		6.8%	
I don't work with others												

	Wooster Cohort			Aggregate							
	2005	2006	2007	2005		Colleges (Carnegie Classification)	2006		Colleges (Carnegie Classification)	2007	
				Overall	Overall		Overall	Overall			
<b>Peer Mentoring Experience</b>											
<b>Peer Mentoring</b>	<b>n=</b>	<b>3</b>	<b>3</b>								
My job explicitly included mentoring	2	3	1	15			20			26	
Informal peer mentoring	1	1	3	28			46			49	
I taught or trained another undergraduate	2	2	1	23			44			51	
Offered coaching or social support	2	1	1	18			36			21	
Role model	2	1	2	21			40			41	
Responsible for the results of a group of students	1		1	6			16			18	
I was given assignments to teach to other students	1	1	2	15			22			27	
I was alone with other students as their teacher			1	9			15			27	
<b>Preparation</b>											
I was assigned to be a peer mentor	2	3	3	13			22			33	
I had training		2		5			8			4	
I attended a seminar on how to mentor		1		3			5			1	
Mentoring was part of my performance evaluation		1		3			3			4	
<b>Experience as a mentor</b>											
Very positive	1	1	3	44.4%			49.2%			44.40%	
Moderately positive	1	2		38.9%			39.0%			38.10%	
Neutral				13.9%			10.2			15.9	
Moderately negative				2.8%			1.7			1.6	
Very negative				0.0%			0			0	

	Wooster Cohort			Aggregate							
	2005	2006	2007	2005		Colleges (Carnegie Classification)	2006		Colleges (Carnegie Classification)	2007	
				Overall	Overall		Overall	Overall			
				Overall	Overall	Overall					

**Would you mentor in the future?**

Yes	2	3	3	100.0%	98.0%	96.40%
No					2.0%	3.6%

**Ratings of mentoring experience (1 to 5 scale)**

	n=	2	3	<= 3			
I enjoyed the responsibility	4.50	4.67	5.00	4.08	4.33	4.43	
I enjoyed teaching	4.50	4.67	4.67	4.06	4.17	4.25	
I gained self-confidence as a researcher	4.50	4.33	5.00	4.21	4.48	4.46	
I felt that my supervisor did not prepare me	2.50	3.33	2.50	2.49	2.11	2.11	
My oral communication skills improved	3.50	3.67	4.33	3.56	3.55	3.71	
I was given responsibility beyond my experience	2.50	3.33	1.50	3.00	2.52	2.51	
I felt pressure to make sure the others did well	2.50	3.00	2.00	3.08	3.05	2.80	
I felt responsibility for the research	5.00	4.33	3.67	4.00	4.13	4.04	
I was on my own too often	2.00	3.67	1.33	2.54	2.23	2.24	
My role deepened my understanding of the research project	4.50	4.00	5.00	3.97	4.22	4.20	
My role increased my motivation to work on research	4.50	4.33	5.00	3.83	3.93	4.05	
I did well as a peer mentor	4.00	4.00	4.00	3.77	4.07	4.02	

key: 1 = Strongly disagree, 5 = Strongly agree

	Wooster Cohort			Aggregate							
	2005	2006	2007	2005		Colleges (Carnegie Classification)	2006		Colleges (Carnegie Classification)	2007	
				Overall	Overall		Overall	Overall		Overall	Overall
<b>Evaluating a peer mentor</b>											
	n=	4	5	<= 4			37		34		35
My peer mentor helped me appreciate the significance of the research		4.25	4.20	4.25		4.11 *		4.18		4.00	
My peer mentor understood my concerns		3.75	4.60	4.75		4.08		4.26		4.03	
I asked the mentor questions I was afraid to ask my supervisor		3.75	4.60	5.00		3.97 **		3.76		3.80	
I would have learned more if there had been no mentor		1.25	1.20	1.25		1.64 *		1.50		1.69 *	
I feel the use of mentors enabled faculty and graduate mentors to ignore me		1.25	2.00	2.00		1.78		2.15 *		1.94	
My peer mentor had a positive impact on my research experience		4.75	4.80	4.50		4.38		4.38		4.11	

key: 1 = Strongly disagree, 5 = Strongly agree

\* n= 36

\*\* n= 35

\* n= 33

\* n=36

	Wooster Cohort			Aggregate									
	2005	2006	2007	2005		Colleges (Carnegie Classification)	2006		Colleges (Carnegie Classification)	2007			
				Overall	Overall		Overall	Overall					
<b>Mean Benefits</b>													
21 items about learning gains	n=			standard deviation	mean		mean	standard deviation	mean		mean	standard deviation	mean
		<= 15											
Clarification of a career path	3.60	3.06	3.07	1.00	3.48		3.29	1.08	3.42		3.21	1.07	3.40
Skill in interpretation of results	4.07	3.63	3.67	0.94	3.86		3.80	0.95	3.88		3.63	1.05	3.70
Tolerance for obstacles faced in the research process	4.53	4.29	4.00	0.90	4.07		3.98	0.94	4.01		3.94	0.97	3.93
Readiness for more demanding research	4.60	3.82	4.13	0.90	4.06		4.01	0.93	4.06		3.97	0.97	3.98
Understanding how knowledge is constructed	4.13	3.71	3.80	0.95	3.85		3.75	1.00	3.85		3.68	1.04	3.75
Understanding the research process	4.80	4.29	4.29	0.89	4.17		4.11	0.89	4.19		4.06	0.95	4.09
Ability to integrate theory and practice	4.47	3.82	3.73	0.93	3.80		3.81	0.93	3.88		3.66	1.04	3.72
Understanding how scientists work on real problems	4.60	4.24	4.20	0.93	4.03		3.95	0.96	4.05		3.83	1.03	3.97
Understanding that scientific assertions require supporting evidence	4.13	4.00	3.93	1.17	3.75		3.47	1.20	3.75		3.43	1.26	3.63
Ability to analyze data and other information	4.00	3.65	3.93	0.97	3.84		3.77	1.00	3.87		3.69	1.09	3.78
Understanding science	4.33	3.53	3.86	1.00	3.71		3.54	1.04	3.72		3.46	1.13	3.58
Learning ethical conduct	4.27	3.88	3.07	1.20	3.29		3.10	1.26	3.32		3.01	1.31	3.19
Learning laboratory techniques	4.53	3.88	4.00	1.10	4.13		3.92	1.15	4.08		3.83	1.30	3.89
Ability to read and understand primary literature	4.20	3.76	3.73	1.08	3.71		3.59	1.11	3.66		3.52	1.17	3.57
Skill in how to give an effective oral presentation	4.33	4.18	3.80	1.28	3.52		3.36	1.26	3.45		3.24	1.32	3.28
Skill in science writing	3.47	3.35	2.47	1.17	3.25		2.98	1.21	3.23		2.88	1.24	3.18
Self-confidence	4.33	4.18	3.40	1.10	3.62		3.57	1.09	3.63		3.45	1.15	3.48
Understanding how scientists think	4.27	4.06	3.60	1.00	3.69		3.57	1.01	3.74		3.43	1.10	3.58
Learning to work independently	4.40	4.24	3.43	1.10	3.89		3.81	1.10	3.87		3.72	1.16	3.75

	Wooster Cohort			Aggregate								
	2005	2006	2007	2005		Colleges (Carnegie Classification)	2006		Colleges (Carnegie Classification)	2007		
				Overall	Overall		Overall	Overall		Overall	Overall	
Becoming part of a learning community	4.13	3.94	3.69	1.08	3.78	3.60	1.10	3.78	3.62	1.14	3.68	
Confidence in my potential as a teacher	3.42	3.00	3.54	1.20	3.35	3.21	1.23	3.34	3.20	1.27	3.27	

key: 1 = no gain or very small, 5 = very large gain

Overall Experience											
<b><i>I prefer to work with</i></b>											
	n=	14	17	15							
More people		2	3	4	24.2%	26.1%	25.9%	30.4%			30.7%
Same number of people		12	13	10	69.0%	68.9%	67.2%	61.1%			64.0%
Fewer people		0	1	1	6.9%	5.0%	6.8%	8.5%			5.3%
<b><i>I prefer to work with others</i></b>											
	n=	15	17	15							
Less often		0	1	2	6.6%	6.5%	5.9%	9.3%			7.4%
Same as now		12	12	9	65.0%	63.6%	63.9%	59.8%			60.2%
More often		3	4	4	28.3%	29.9%	30.3%	30.9%			32.5%
<b>Expectations</b>											
	n=	15	17	14							
The experience was worse than I expected		0	1	0	3.6%	2.0%	2.2%	3.7%			4.1%
A little worse than I expected		0	2	3	6.3%	9.8%	9.3%	11.0%			10.7%
Met my expectations		5	0	6	30.0%	31.9%	29.7%	36.9%			32.5%
A little better than I expected		6	5	4	29.1%	28.0%	26.8%	25.9%			26.5%
Much better than I expected		4	9	1	31.0%	28.2%	32.0%	22.5%			26.2%

	Wooster Cohort			Aggregate						
	2005	2006	2007	2005		2006			2007	
				Overall	Overall	Colleges (Carnegie Classification)	Overall	Overall	Colleges (Carnegie Classification)	Overall
<b>Primary Supervisor</b>										
	n=	14	17	15						
Was not a good teacher and mentor		0	1	0	1	2.8%	1.5%	1.9%	2.6%	2.4%
Was below average		0	0	1	1	3.8%	3.7%	3.7%	3.9%	4.6%
Was about average		1	2	3	6	10.9%	15.1%	12.8%	15.1%	15.0%
Was above average		6	7	5	18	32.7%	30.8%	30.7%	32.5%	33.3%
Was an outstanding teacher and mentor		7	7	6	20	49.8%	49.0%	50.9%	46.0%	44.8%
<b>Evaluation of working with other students</b>										
	n=	12	13	14						
Worst part of the experience		0	0	0		2.6%	1.8%	1.4%	1.6%	1.4%
Moderately detracted from my experience		1	1	0		5.5%	3.3%	3.8%	7.4%	7.5%
Did not affect my experience		1	0	2		14.6%	13.0%	17.4%	11.9%	17.0%
Moderately enhanced my experience		5	4	7		37.9%	41.9%	40.0%	41.8%	41.0%
One of the best parts of the experience		5	8	5		39.5%	39.9%	37.4%	37.3%	33.1%
<b>Will you choose another research experience?</b>										
	n=	14	14	13						
I will not		0	0	1		2.3%	1.6%	2.1%	2.4%	2.5%
I am unlikely to		0	1	2		5.9%	5.2%	5.8%	6.8%	6.9%
I am likely to		1	2	2		19.5%	22.3%	24.0%	17.8%	22.8%
I am very likely to		13	11	8		72.3%	70.9%	68.1%	73.1%	67.8%

**2005-2007 SURE II Survey  
A Collaborative Project funded by HHMI  
Summary for College of Wooster**

		Program Components																	
		2005					2006					2007							
		1	2	3	4	5	n=	1	2	3	4	5	n=	1	2	3	4	5	n=
<b>Preparing an application or proposal</b>																			
<b>Overall</b>		0.4%	4.9%	30.0%	41.3%	23.4%		0.8%	4.9%	34.1%	36.3%	23.9%		0.9%	6.1%	35.5%	36.9%	20.6%	
<b>Wooster</b>		0.0%	0.0%	27.3%	36.4%	36.4%	11	0.0%	9.1%	45.5%	18.2%	27.3%	11	0.0%	0.0%	25.0%	50.0%	25.0%	4
<b>Seminars at which scientists discuss research</b>																			
<b>Overall</b>		0.6%	3.0%	19.9%	42.0%	34.5%		1.0%	3.8%	19.7%	43.9%	31.6%		1.2%	5.9%	20.3%	41.8%	30.8%	
<b>Wooster</b>		0.0%	12.5%	25.0%	37.5%	25.0%	8	0.0%	0.0%	38.5%	30.8%	30.8%	13	0.0%	0.0%	30.0%	40.0%	30.0%	10
<b>Seminars on safety</b>																			
<b>Overall</b>		2.8%	10.3%	45.8%	26.3%	14.8%		4.5%	14.4%	41.8%	25.9%	13.4%		4.8%	13.4%	39.7%	27.5%	14.7%	
<b>Wooster</b>		0.0%	18.2%	18.2%	54.5%	9.1%	11	0.0%	27.3%	27.3%	27.3%	18.2%	11	0.0%	14.3%	57.1%	28.6%	0.0%	7
<b>Instruction/discussion of ethics</b>																			
<b>Overall</b>		1.2%	6.3%	34.6%	35.3%	22.6%		2.6%	7.8%	35.6%	31.9%	22.2%		2.8%	8.5%	38.7%	30.7%	19.3%	
<b>Wooster</b>		0.0%	0.0%	0.0%	35.7%	64.3%	14	0.0%	6.3%	12.5%	37.5%	43.8%	16	0.0%	0.0%	28.6%	50.0%	21.4%	14
<b>A program of social activities</b>																			
<b>Overall</b>		2.7%	4.4%	25.0%	37.3%	30.6%		3.2%	6.9%	25.8%	35.0%	29.3%		4.8%	7.5%	27.6%	35.1%	25.0%	
<b>Wooster</b>		0.0%	7.7%	61.5%	15.4%	15.4%	13	0.0%	18.8%	18.8%	43.8%	18.8%	16	0.0%	0.0%	45.5%	36.4%	18.2%	11
<b>On-campus housing</b>																			
<b>Overall</b>		3.3%	7.2%	18.2%	32.0%	39.3%		6.3%	7.3%	18.5%	24.7%	43.2%		4.9%	8.7%	18.2%	26.1%	42.1%	
<b>Wooster</b>		0.0%	28.6%	14.3%	42.9%	14.3%	14	7.7%	7.7%	23.1%	7.7%	53.8%	13	0.0%	25.0%	16.7%	16.7%	41.7%	12
<b>On-campus meal plan</b>																			
<b>Overall</b>		14.4%	11.3%	24.2%	24.2%	25.8%		18.2%	12.8%	31.4%	18.2%	19.3%		24.3%	10.9%	25.1%	18.0%	21.6%	
<b>Wooster</b>		0.0%	0.0%	0.0%	25.0%	75.0%	4	33.3%	16.7%	33.3%	0.0%	16.7%	6						0
<b>Final presentation of work</b>																			
<b>Overall</b>		0.3%	1.8%	10.5%	39.5%	48.0%		0.7%	2.2%	10.7%	40.7%	45.8%		0.9%	2.4%	15.2%	40.1%	41.4%	
<b>Wooster</b>		0.0%	0.0%	0.0%	21.4%	78.6%	14	0.0%	0.0%	13.3%	40.0%	46.7%	15	0.0%	14.3%	21.4%	28.6%	35.7%	14

Key: 1 = Very negative, 5 = Very positive