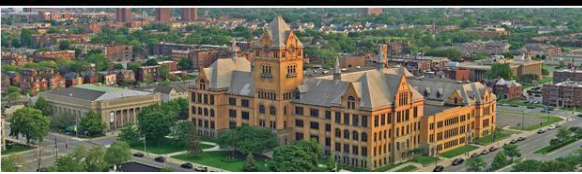


2017 C² Pipeline Summer Day Camp Programs Student Feedback



THE CENTER FOR URBAN STUDIES



Highlights from Feedback

- 211 students participated in the survey:
 - They attended 15 different day camp sessions.
 - They were students from 64 different schools.
 - They ranged from 12 to 21 years old, with nearly three-quarters aged between 14 and 16.
- The majority of students somewhat agreed or strongly agree that they knew the steps to take to enter a STEM/health field (74%).
- Nearly 79% of students somewhat agreed or strongly agreed that they planned to enter a STEM or health career. (Note some students indicated plans to enter both.)
 - For STEM career: 67%
 - For Health career: 58%

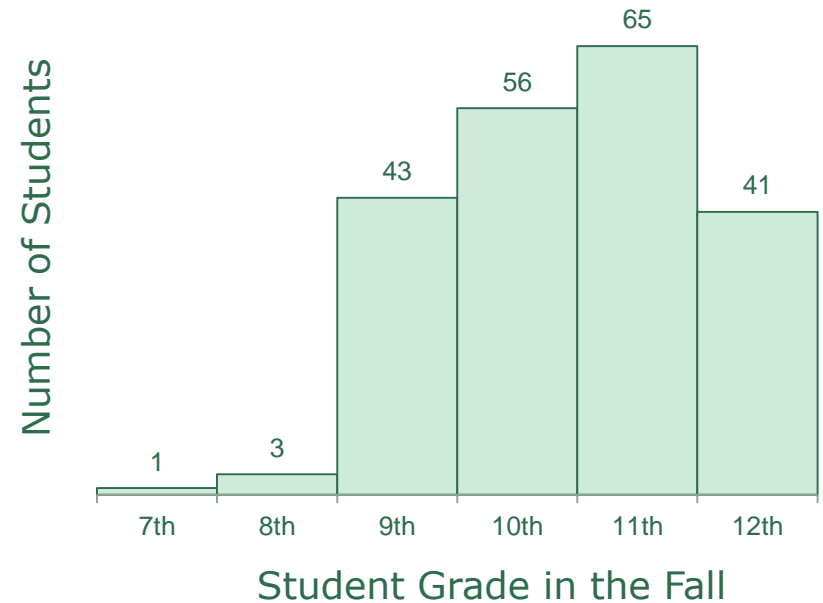
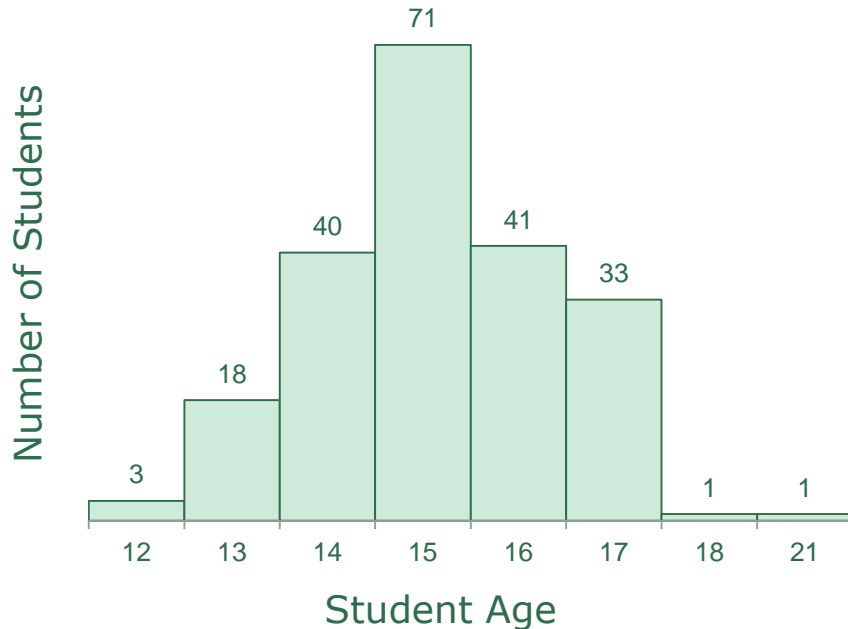
Highlights from Feedback (cont.)

- The majority somewhat or strongly agreed that they would recommend the C²P summer programs to a friend (82%) or participate in more C²P summer programs (80%).
- At least three-fifths of students reported the camps had “just the right amount” of:
 - Hands-on experiences (73%);
 - Contact with experts in the field (67%); and
 - Presentations (63%).
- Still, over one-quarter of students reported they had “too little” contact with experts in the field (28%).
 - Several suggestions for improvements to camps suggested time to interact or shadowing someone working in the field of interest.
- A bit less than one-quarter of students reported they had “too little” hands-on experiences (24%).
 - Several suggestions for improvements to camps were requests for more of this.

Detailed Results from Day Camp Student Feedback Surveys

Overall Respondents

- 211 students participated in the survey.
- Most students who completed the survey (n=152; 73%) were between 14 and 16 years old.
- Almost three-fifths (n=121; 58%) planned to start 10th or 11th grade in the fall. About one-fifth (n=41; 20%) were rising 12th graders.
- Respondents were students from 64 different schools.
 - Warren Mott and Waterford Mott students together were nearly one-quarter of all participants (n=24; 11% each).
 - 64% (n=135) attended a school that is a C²P afterschool site.



Overall Respondents (cont.)

School	Number	Percentage of Respondents
Clintondale High School	2	1.0%
Detroit Collegiate Prep (Detroit Northwestern)	8	3.8%
East Detroit High School	6	2.9%
Ecorse Community High School	1	0.5%
Harper Woods High School	2	1.0%
Michigan Collegiate High School	6	2.9%
Oak Park High School	7	3.3%
Pontiac Academy for Excellence	18	8.6%
South Lake High School	15	7.1%
Southfield Arts and Technology High School (Southfield Lathrup High School)	12	5.7%
Southfield Regional Academic Campus	4	1.9%
University High School	6	2.9%
Warren Mott High School	24	11.4%
Waterford Mott High School	24	11.4%
Other	75	35.7%
Total	210	100%

Overall Respondents (cont.)

Camp Attended	Number	Percentage of Respondents
Forensic Investigation	34	16.7%
Nursing Sim Lab (2 different sessions)	29	14.2%
GROSS! Anatomy	21	10.3%
Movie Making	20	9.8%
Beyond the Lemonade Stand	19	9.3%
STEM World	17	8.3%
Hack-a-Thon	12	5.9%
Underwater Robotics	12	5.9%
Camp Apple	9	4.4%
Camp Improv	9	4.4%
Bio Printing & Tissue Engineering Camp	8	3.9%
Rube Goldberg/Tinker Bot	6	2.9%
Water Quality & Environmental Testing	6	2.9%
Biomedical Engineering & Sports Medicine	2	1.0%
Total	204	100%

What was your favorite activity from this camp? (N=193)



Favorite Activities ($N=193$)

Most Common Activity Categories	Number	Percentage of Respondents
Building / Making	38	19.7%
Field Trips	27	14.0%
Acting / Filming	19	9.8%
Dissection	17	8.8%
Birth Sim	14	7.3%
Blood Splatter	13	6.7%
Coding	10	5.2%
Learning/Discovering New Things	10	5.2%
Drones	7	3.6%
Robotics	6	3.1%
Scars and Wounds / Moulage	6	3.1%
Presenting Work / Shark Tank	6	3.1%
Clinicals	5	2.6%
Crime Scene Activity	5	2.6%
Lunch/Recess	5	2.6%
Games/Sports	5	2.6%
Bioprinter	5	2.6%
Learn about new fields (or a specific field)	5	2.6%
Everything	6	3.1%
Other	25	13.0%
All	193	100%

What did you like most about this activity? ($N=192$)



Least Favorite Activities ($N=188$)

Most Common Activity Categories	Number	Percentage of Respondents
Nothing/Liked everything	59	31.4%
Particular specific task	51	27.1%
Lectures/Listening to talking	15	8.0%
The work/the project	10	5.3%
Walking	9	4.8%
Specific Field Trips	9	4.8%
Social Aspects	5	2.7%
Instructors	4	2.1%
Other	27	14.4%
All	188	100%

Examples of “Particular specific task”	Number	Percentage of Respondents
A specific dissection	5	2.7%
Making scars	4	2.1%
Blood pressure	3	1.6%
Editing the movie	2	1.1%
Taking practice shots	2	1.1%

Other Activities Suggested (*N=160*)

Most Common Activity Categories	Number	Percentage of Respondents
None	19	11.9%
More of activities already in camp	18	11.3%
Suggested other STEMH fields	17	10.6%
Athletic/recreational/fun/extracurricular activities	16	10.0%
More hands-on/interactive activities	15	9.4%
Field trips	11	6.9%
More/in-depth focus on topics from camp	11	6.9%
Visual arts	9	5.6%
Suggested activities in other C2 camps	9	5.6%
More "day in the life" of , or interaction with someone in, a particular field	8	5.0%
Culinary arts, cooking activities	7	4.4%
Performing arts	6	3.8%
Additional activities on camp's topic	5	3.1%
Other	22	13.8%
All	194	100%

STEM and Health Careers

	Number responded	Average Response	Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree
I can see how this camp's activities were related to a STEM or health career.	157	1.76	54.8%	25.5%	11.5%	5.7%	2.5%
I have an understanding of what it is like to work in a STEM or health career.	157	2.06	39.5%	33.8%	13.4%	8.3%	5.1%
My participation in this camp made me more interested in having a STEM or health career.	157	2.06	45.9%	22.3%	19.7%	4.5%	7.6%



Camp Components

	Number responded	Average Response	Too much	Just the Right Amount	Too Little
Hands-on experiences	169	2.21	3.0%	73.4%	23.7%
Contact with experts in the field	169	2.24	4.1%	67.5%	28.4%
Presentations	169	1.95	20.7%	63.3%	16.0%



Overall Impressions of Camp

	Number responded	Average Response	Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree
This camp met my expectations.	173	2.17	39.3%	32.4%	9.2%	10.4%	8.7%
I would recommend the C2 Pipeline summer programs to a friend.	173	1.74	57.2%	24.9%	8.7%	5.2%	4.0%
I want to participant in more C2 Pipeline summer programs.	172	1.78	57.6%	22.1%	11.0%	3.5%	5.8%



Future Plans

	Number responded	Average Response	Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree
I know what steps I would need to take to become a science, technology, engineering, math (STEM) or health professional.	168	2.05	33.9%	40.5%	16.1%	5.4%	4.2%
I am excited about going to college.	168	1.57	60.1%	25.0%	13.1%	1.2%	0.6%
I plan to take STEM or health classes in high school.	170	1.88	50.6%	25.3%	13.5%	6.5%	4.1%
I plan to take STEM or health classes in college.	166	1.76	54.8%	25.9%	11.4%	4.2%	3.6%
I plan to enter a health career.	168	2.43	41.1%	16.7%	16.1%	10.1%	16.1%
I plan to enter a STEM career	170	2.15	38.8%	28.2%	19.4%	6.5%	7.1%



Activity Feedback from Individual Camps

STEM and Health Careers

I can see how this camp's activities were related to a STEM or health career. I have an understanding of what it is like to work in a STEM or health career. My participation in this camp made me more interested in having a STEMH career.

	<u>N</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>
All						
Forensic Investigation	26	1.38	26	2.04	26	1.65
Nursing Sim Lab	26	1.38	26	1.73	26	1.73
Camp Improv	5	1.80	5	1.80	5	1.80
Movie Making	17	2.47	17	2.94	17	2.88
Rube Goldberg/Tinker Bot	5	1.60	5	1.60	5	1.60
Hack-a-Thon	12	1.92	12	2.42	12	2.42
Bio Printing & Tissue Engineering Camp	5	1.60	5	1.60	5	2.20
Camp Apple	7	1.29	7	1.14	7	1.86
GROSS! Anatomy	18	1.33	18	1.72	18	1.56
Underwater Robotics	6	1.67	6	1.67	6	2.00
Beyond the Lemonade Stand	13	3.00	13	3.08	13	3.23
Biomedical Engineering & Sports Medicine	--	--	--	--	--	--
Water Quality & Environmental Testing	5	1.60	5	1.80	5	2.20
STEM World	8	1.50	8	1.63	8	1.63



Camp Components

	Hands-on experiences		Contact with experts in the field		Presentations	
	<u>N</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>
All	169	2.21	169	2.24	169	1.95
Forensic Investigation	29	2.28	29	2.17	29	1.79
Nursing Sim Lab	28	2.54	28	2.25	28	1.86
Camp Improv	7	2.00	7	2.14	7	2.00
Movie Making	17	2.06	17	2.35	17	1.88
Rube Goldberg/Tinker Bot	5	2.00	5	2.20	5	2.20
Hack-a-Thon	12	2.08	12	2.17	12	2.08
Bio Printing & Tissue Engineering Camp	6	2.17	6	2.83	6	1.67
Camp Apple	6	2.33	6	1.83	6	1.67
GROSS! Anatomy	18	1.94	18	2.44	18	2.28
Underwater Robotics	8	1.88	8	2.25	8	2.25
Beyond the Lemonade Stand	14	2.36	14	1.93	14	1.93
Biomedical Engineering & Sports Medicine	--	--	--	--	--	--
Water Quality & Environmental Testing	6	2.17	6	2.17	6	2.00
STEM World	8	2.13	8	2.38	8	2.13



Overall Impressions of Camp

	This camp met my expectations.		I would recommend the C2 Pipeline summer programs to a friend.		I want to participant in more C2 Pipeline summer programs.	
	<u>N</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>
All	173	2.17	173	1.74	172	1.78
Forensic Investigation	29	2.17	29	1.69	29	1.72
Nursing Sim Lab	28	2.14	28	1.89	28	1.79
Camp Improv	7	1.14	7	1.57	7	1.43
Movie Making	17	2.35	17	1.59	17	1.82
Rube Goldberg/Tinker Bot	6	2.17	6	2.00	6	2.00
Hack-a-Thon	12	2.67	12	1.67	12	1.83
Bio Printing & Tissue Engineering Camp	7	2.86	7	2.00	7	1.57
Camp Apple	8	1.75	8	1.88	7	1.57
GROSS! Anatomy	18	2.11	18	1.50	18	1.44
Underwater Robotics	8	1.75	8	1.38	8	1.63
Beyond the Lemonade Stand	14	2.21	14	1.93	14	2.43
Biomedical Engineering & Sports Medicine	--	--	--	--	--	--
Water Quality & Environmental Testing	6	2.83	6	2.00	6	2.00
STEM World	8	1.50	8	1.50	8	1.50



Future Plans

	I know what steps I would need to take to become a STEM or health professional.		I am excited about going to college.		I plan to take STEM or health classes in high school.	
	<u>N</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>
All	168	2.05	168	1.57	170	1.88
Forensic Investigation	27	2.22	27	1.41	27	1.48
Nursing Sim Lab	28	2.14	28	1.21	28	1.61
Camp Improv	7	1.43	7	1.14	7	1.71
Movie Making	17	2.59	17	2.18	17	2.82
Rube Goldberg/Tinker Bot	6	2.33	6	2.00	6	2.17
Hack-a-Thon	11	1.91	12	1.33	12	1.58
Bio Printing & Tissue Engineering Camp	7	1.86	7	1.57	7	2.43
Camp Apple	7	1.43	6	1.33	7	1.57
GROSS! Anatomy	18	1.72	18	1.67	18	1.67
Underwater Robotics	8	1.63	8	1.25	8	1.50
Beyond the Lemonade Stand	14	2.21	13	2.08	14	2.64
Biomedical Engineering & Sports Medicine	--	--	--	--	--	--
Water Quality & Environmental Testing	6	2.00	6	2.17	6	2.00
STEM World	7	1.57	8	1.50	8	1.63



Future Plans (cont.)

	I plan to take STEM or health classes in college.		I plan to enter a health career.		I plan to enter a STEM career.	
	<u>N</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>
All	166	1.76	168	2.43	170	2.15
Forensic Investigation	27	1.44	27	2.26	27	2.11
Nursing Sim Lab	28	1.21	28	1.25	28	2.11
Camp Improv	7	1.71	6	2.33	7	1.71
Movie Making	16	2.94	17	4.12	17	3.18
Rube Goldberg/Tinker Bot	6	2.50	6	3.67	6	1.33
Hack-a-Thon	11	1.36	11	3.55	12	1.92
Bio Printing & Tissue Engineering Camp	6	1.67	7	1.71	7	2.14
Camp Apple	6	1.83	7	1.71	7	1.43
GROSS! Anatomy	18	1.44	18	1.56	18	2.39
Underwater Robotics	8	1.63	8	2.50	8	1.63
Beyond the Lemonade Stand	14	2.57	14	3.07	14	2.36
Biomedical Engineering & Sports Medicine	--	--	--	--	--	--
Water Quality & Environmental Testing	6	2.00	6	2.67	6	2.33
STEM World	8	1.50	8	2.50	8	1.50

