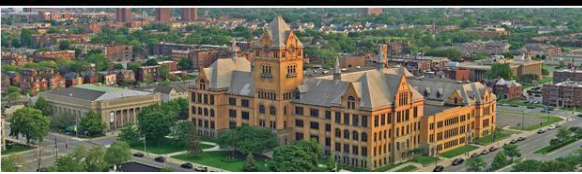


2018 C² Pipeline Summer Day Camp Programs Student Feedback



THE CENTER FOR URBAN STUDIES



Highlights from Feedback

- 246 students participated in the survey:
 - They attended 27 different day camp sessions.
 - They were students from 40 different schools.
 - They ranged from 12 to 17 years old, with the majority between 14 and 16 (83%; n=199).
- The majority of students somewhat agreed or strongly agree that they knew the steps to take to enter a STEM/health field (80%; n=174).
- Nearly 72% 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: 63%
 - For Health career: 50%

Highlights from Feedback (cont.)

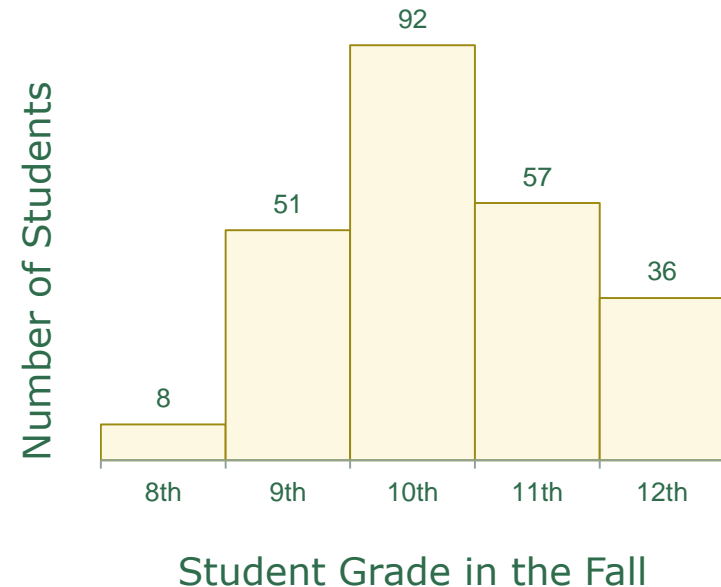
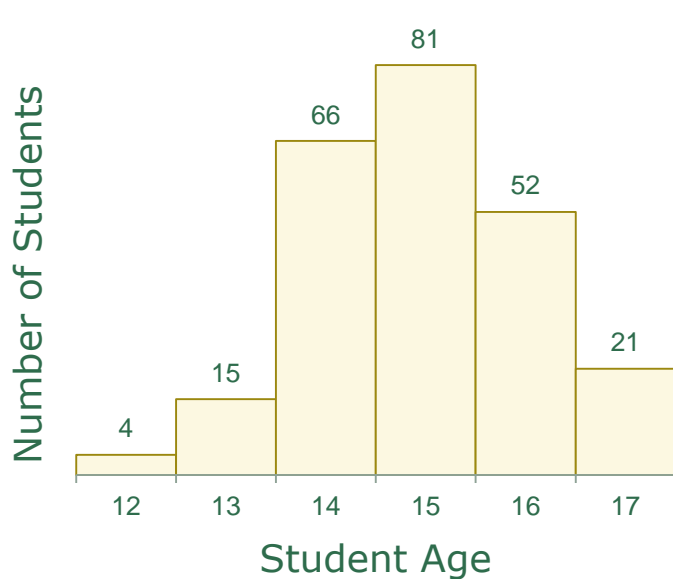
Overall, students expressed a high level of satisfaction with the camp sessions.

- The majority somewhat or strongly agreed that they would recommend the C²P summer programs to a friend (90%) and want to participate in more C²P summer programs (86%).
- Students also somewhat or strongly agreed that they could see how their camps' activities related to STEM or health careers (82%)
- At least two-thirds of students reported the camps had “just the right amount” of:
 - Hands-on experiences (80%);
 - Contact with experts in the field (77%); and
 - Presentations (68%).

Detailed Results from Day Camp Student Feedback Surveys

Overall Respondents

- 246 students participated in the survey, from 27 day camps.
- Most students who completed the survey (n=199; 82%) were between 14 and 16 years old.
- About three-fifths (n=149; 61%) planned to start 10th or 11th grade in the fall. Less than one-fifth (n=36; 15%) were rising 12th graders.
- Respondents reported attending 40 different schools.
 - Over half reported attending three schools (n=130; 53%): Warren Mott (n=48; 20%), Southfield Arts & Technology (n=46; 19%), and South Lake (n=36; 15%).
 - 73% (n=179) attended a school that is a C²P afterschool site.



Overall Respondents (cont.)

School	Number	Percentage of Respondents
Warren Mott High	48	19.7%
Southfield Arts & Technology	46	18.9%
South Lake High	36	14.8%
Waterford Mott High	17	7.0%
Ecorse Community High	8	3.3%
Clintondale High	6	2.5%
Oak Park High	6	2.5%
Michigan Collegiatel/Connor Creek Academy	5	2.0%
University High - Ferndale	4	1.6%
East Detroit High	3	1.2%
Other	65	26.6%
Total	244	100%

Overall Respondents (cont.)

<u>Respondents</u>		
Camp Attended	Number	Percentage
Lemonade Stand	20	8.1%
Forensics/CSI	21	8.5%
Nursing	18	7.3%
GROSS! Anatomy	17	6.9%
Future Engineers	14	5.7%
Aerospace	14	5.7%
Camp IMPROV	13	5.3%
Filmmaking	13	5.3%
Engineering Entrepreneur	12	4.9%
Video Gaming	12	4.9%
Photography	12	4.9%
Camp Apple	10	4.1%
Underwater Robotics	8	3.3%
Construction Technology	8	3.3%

<u>Respondents</u>		
Camp Attended	Number	Percentage
Girls Who Code	7	2.8%
STEAM Theatre	7	2.8%
Cyber Security	6	2.4%
STEM World	5	2.0%
Cage Drones	5	2.0%
Mindstorm Robotics	4	1.6%
Bio-Med	3	1.2%
Cardboard Furniture	3	1.2%
Sports Writing	3	1.2%
Cardboard Boat Competition	3	1.2%
Food Writing	3	1.2%
Mouth Matters	3	1.2%
Crypto Club	2	0.8%
Total	246	100%

Favorite Activities ($N=238$)

239 participants shared 277 activities as favorites. Below are the most common categories of responses. These represent comments from 211 respondents.

Most Common Activity Categories	Number	Percentage of Respondents
Field Trips	40	16.8%
Building/Making	36	15.1%
Taking Pictures/ Filming	27	11.3%
Coding	20	8.4%
Simulations	14	5.9%
Dissection	12	5.0%
Meeting with professionals in the field	12	5.0%
Flying Jet/Plane	10	4.2%
Drones	9	3.8%
Robotics	7	2.9%
Games/Sports	7	2.9%
Blood Splatter	6	2.5%
Learning	6	2.5%
Food	5	2.1%

Least Favorite Activities (N=224)

Most Common Activity Categories	Number	Percentage of Respondents
Nothing/Liked everything	60	26.8%
Particular specific task	51	22.8%
Videos	22	9.8%
The work/the project	21	9.4%
Lectures/Listening to talking	19	8.5%
Specific Field Trips	15	6.7%
Walking/being outside	10	4.5%
Repetitive	7	3.1%

For context--

Student responses coded as a “Particular specific task”

- a specific day (i.e. “the third day”)
- An individual activity (“recording” in Camp IMPROV, “making bumps” in Nursing)

Student responses coded as “The work/the project” included

- “dissecting organs” in GROSS!Anatomy, “learning about the parts and science of planes” in Aerospace, and “coding” in Video Gaming

Other Activities Suggested (*N=213*)

213 participants made 235 suggestions. Below are the most common categories of responses. These represent comments from 203 respondents.

Most Common Activity Categories	Number	Percentage of Respondents
None	33	15.6%
Additional activities on camp's topic	33	15.6%
Athletic/Recreational/Fun/Extracurricular Activities	31	14.6%
Don't Know/Not Sure	21	9.9%
Field Trips	17	8.0%
Suggested Camp--non STEMH	16	7.5%
Other	16	7.5%
Suggested Camp--STEMH	15	7.1%
Arts (Visual Arts, Performing, etc.)	12	5.7%
More Hands-on/Interactive Activities	11	5.2%
Suggested activities in other C2 Camps	11	5.2%
Culinary Arts, Cooking Activities	5	2.4%

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.	210	1.73	56.2%	26.2%	9.5%	4.3%	3.8%
I have an understanding of what it is like to work in a STEM or health career.	209	1.80	46.4%	38.3%	8.1%	2.9%	4.3%
My participation in this camp made me more interested in having a STEM or health career.	207	1.90	45.9%	30.4%	15.5%	3.9%	4.3%



Camp Components

	Number responded	Average Response	Too much	Just the Right Amount	Too Little
Hands-on experiences	217	2.08	6.0%	80.2%	13.8%
Contact with experts in the field	216	2.13	5.1%	76.9%	18.1%
Presentations	214	1.93	19.2%	68.2%	12.6%



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.	227	1.78	46.7%	36.1%	12.3%	2.6%	2.2%
I would recommend the C ² Pipeline summer programs to a friend.	224	1.54	61.6%	28.6%	5.8%	2.7%	1.3%
I want to participant in more C ² Pipeline summer programs.	224	1.59	62.9%	22.8%	8.9%	2.7%	2.7%



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.	218	1.86	40.4%	39.4%	14.7%	4.6%	0.9%
I am excited about going to college.	218	1.60	58.7%	26.6%	11.9%	1.8%	0.9%
I plan to take STEM or health classes in high school.	217	1.90	45.6%	28.1%	19.8%	3.7%	2.8%
I plan to take STEM or health classes in college.	216	2.02	39.8%	30.1%	22.2%	4.2%	3.7%
I plan to enter a health career.	216	2.67	27.3%	22.2%	22.7%	11.6%	16.2%
I plan to enter a STEM career	217	2.23	35.0%	27.2%	24.0%	7.4%	6.5%



Activity Feedback from Individual Camps*

* Camps that had at least 5 participants respond to the survey

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	210	1.73	209	1.80	207	1.90
Aerospace	14	2.00	14	2.07	14	2.00
Camp Apple	10	1.10	10	1.30	10	1.20
Camp IMPROV	10	1.80	10	2.00	10	2.40
Construction Technology	8	2.25	8	2.63	8	2.75
Cyber Security	6	1.67	6	2.00	6	1.67
Engineering Entrepreneur	10	1.70	10	2.20	10	2.20
Filmmaking	13	2.23	13	2.08	13	2.15
Forensics/CSI	16	1.50	16	1.69	16	1.81
Future Engineers	14	1.14	14	1.50	14	1.50
Girls Who Code	5	1.00	5	1.60	5	2.20
GROSS! Anatomy	14	1.57	14	1.71	14	1.64
Lemonade Stand	17	2.47	16	2.00	15	2.13
Nursing	12	1.25	13	1.15	12	1.08
Photography	11	2.09	10	1.70	10	2.00
STEAM Theatre	7	2.00	7	2.29	7	3.14
Underwater Robotics	5	1.80	5	1.60	5	1.80



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	217	2.08	216	2.13	214	1.93
Aerospace	14	2.07	14	1.79	14	1.86
Camp Apple	10	2.10	10	2.10	10	1.70
Camp IMPROV	10	2.00	10	2.20	10	2.30
Construction Technology	8	2.13	8	2.00	8	1.88
Cyber Security	6	2.00	6	2.00	6	2.17
Engineering Entrepreneur	11	2.09	11	2.27	11	1.82
Filmmaking	13	2.08	12	2.17	12	1.92
Forensics/CSI	19	1.95	19	2.16	19	1.68
Future Engineers	14	2.14	14	2.00	14	1.79
Girls Who Code	5	2.20	5	2.80	5	2.40
GROSS! Anatomy	15	1.87	14	2.07	14	1.86
Lemonade Stand	18	2.44	18	1.83	17	1.94
Nursing	15	2.40	15	2.13	15	1.93
Photography	10	2.00	11	2.36	10	2.00
STEAM Theatre	7	2.14	7	2.29	7	1.71
Underwater Robotics	5	1.80	5	2.40	5	2.20



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	227	1.78	224	1.54	224	1.59
Aerospace	14	1.36	14	1.00	14	1.07
Camp Apple	10	1.50	10	1.30	10	1.20
Camp IMPROV	10	1.10	10	1.30	10	1.10
Construction Technology	8	2.63	8	2.38	8	2.13
Cyber Security	6	1.67	6	2.00	6	1.33
Engineering Entrepreneur	12	1.83	12	1.67	12	1.67
Filmmaking	13	2.08	13	1.54	13	1.77
Forensics/CSI	19	2.11	19	1.74	19	1.74
Future Engineers	14	1.64	14	1.14	14	1.50
Girls Who Code	5	1.60	5	1.20	5	1.00
GROSS! Anatomy	16	1.63	16	1.56	16	1.50
Lemonade Stand	19	2.26	18	2.17	18	2.50
Nursing	16	1.63	16	1.25	16	1.13
Photography	11	2.36	10	1.60	10	1.90
STEAM Theatre	7	1.86	7	1.29	7	1.57
Underwater Robotics	6	1.67	6	1.50	6	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	218	1.86	218	1.60	217	1.90
Aerospace	14	1.93	14	1.57	14	1.71
Camp Apple	9	1.44	9	1.22	9	1.89
Camp IMPROV	10	2.20	10	1.80	10	2.20
Construction Technology	8	2.25	8	2.63	8	2.50
Cyber Security	6	1.83	6	1.17	6	1.33
Engineering Entrepreneur	12	1.75	12	1.83	11	2.00
Filmmaking	13	2.08	12	1.75	13	2.38
Forensics/CSI	19	1.68	19	1.58	19	1.95
Future Engineers	14	2.00	14	1.57	14	1.21
Girls Who Code	5	2.00	5	1.00	5	1.20
GROSS! Anatomy	16	1.50	16	1.56	16	1.63
Lemonade Stand	18	2.22	17	1.76	18	2.50
Nursing	15	1.60	16	1.25	16	1.38
Photography	10	2.20	11	1.64	10	2.30
STEAM Theatre	7	1.86	7	1.71	7	2.29
Underwater Robotics	5	1.40	5	1.40	5	1.60



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	216	2.02	216	2.67	217	2.23
Aerospace	14	2.00	14	3.00	14	1.93
Camp Apple	9	1.67	9	1.67	9	1.89
Camp IMPROV	9	2.00	9	3.44	10	2.10
Construction Technology	8	2.63	7	3.57	8	2.25
Cyber Security	6	2.00	5	2.60	6	1.83
Engineering Entrepreneur	12	2.25	12	2.83	12	2.42
Filmmaking	12	2.58	13	3.08	13	2.85
Forensics/CSI	19	2.00	19	2.63	19	2.05
Future Engineers	14	1.64	14	3.00	14	1.86
Girls Who Code	5	1.00	5	2.20	5	1.80
GROSS! Anatomy	16	1.50	16	1.63	15	1.67
Lemonade Stand	18	2.56	18	3.33	18	3.00
Nursing	16	1.75	16	1.56	15	2.13
Photography	10	2.70	10	3.30	10	2.80
STEAM Theatre	7	2.57	7	2.43	7	2.71
Underwater Robotics	4	1.50	5	3.20	5	2.00

