

# Evaluation of the 2017 C<sup>2</sup> Pipeline College Warriors Experience



## Presentation Overview

- I. Highlights from Evaluation Findings
- II. Conclusions and Recommendations
- III. Detailed Survey Results

# Results from Student Pre- and Post-Program Surveys

## Student Surveys

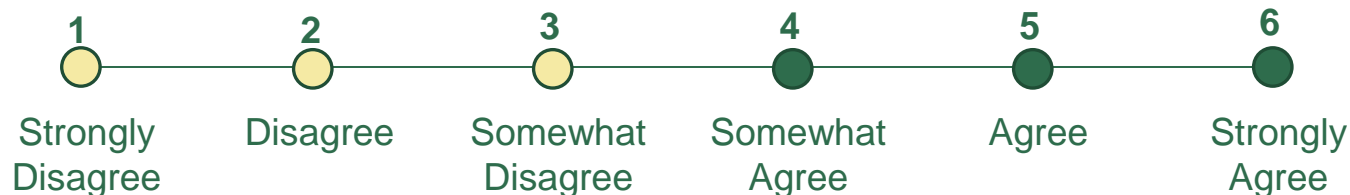
Completed Pre-Program Survey	Completed Program	Completed Post-Program Survey
92	89	86

- Participants completed the pre-program survey as part of the application process.
- Most participants, 97%, who completed the program also completed a post survey.
- All participants had completed at least 9<sup>th</sup> grade:
  - 42 rising 12<sup>th</sup> graders
  - 25 rising 11<sup>th</sup> graders
  - 24 rising 10<sup>th</sup> graders
- 89 students reported attending 39 area high schools
  - More than half (47 out of 89) of participants were students from the 12 sites of the C<sup>2</sup>P afterschool program.

## Student Survey Instrument

The student survey, taken both before and after the program, consisted of:

- A series of statements focused on the following areas:
  - Preparing for college
  - Career choices
  - Knowledge about health careers
  - Thoughts on teamwork
  - Wayne State campus and Detroit
- Students were asked to indicate, on a scale of 1 to 6, how much they agreed or disagreed with each.



- Open-ended questions about students' planned choices for college/university, major, and career

## Highlights from Student Survey Results

12 findings were found to be statistically significant\*, related to the following expected outcomes:






- Students will...
  - Be more ready to succeed in college
  - Be more ready to select career path
  - Have improved perception of WSU
  - Be more interested in attending WSU

\* Based on paired responses, from the 86 participants who completed pre- and post-program surveys.

## Statistically Significant Findings

- Students will...
  - Be more ready to succeed in college
    - Differences in pre/post responses indicated some areas in which students felt **less prepared** to succeed in college, after the program, (Q2, Q4, Q7, Q10, Q12).
  - Be more ready to select career path
    - Differences in pre/post responses suggested that, after the program, they were **less sure** about selecting a major and a career path (Q14, Q16).
    - After the program, students reported **better understanding** the work in a health/STEM career (Q19).
  - Have improved perception of WSU
  - Be more interested in attending WSU
    - Differences in pre/post responses suggested that, after the program, they had a **lower perception** of WSU and were **less interested** in attending (Q24, Q25).

# Statistically Significant Findings: Preparing for College

		Average Response (N=86)	
		Pre	Post
Q2	I am having a hard time breaking away from my family, and attending college will make the situation worse.	2.01	2.40 
Q4	My family and I talk about my college and career plans.	5.49	5.15 
Q7	I understand the FAFSA process and plan to complete it.	4.40	3.91 
Q10	I want to live on campus during my college years.	5.06	4.62 
Q12	I will need better study habits than I have right now so I can do well in college.	4.81	5.16 

Statistically significant (p<0.05)





# Statistically Significant Findings: Selecting a Career Path & Knowledge about Health Careers & Teamwork

		Average Response (N=86)	
		Pre	Post
Q14	I have chosen a major and I feel confident about my decision.	4.88	4.26 ↓
Q16	I have found at least one career that seems to fit well with my personality and interests.	5.40	5.04 ↓
Q19	I have an understanding of what it is like to work in a health/STEM career.	3.76	4.17 ↑
Q21	I can work well with others as a team.	5.40	5.06 ↓
Q22	Teamwork is important in solving health/STEM problems.	5.51	5.30 ↓

Statistically significant (p<0.05)



# Statistically Significant Findings: Thoughts on WSU

		Average Response (N=86)	
		Pre	Post
Q24	I think Wayne State University has a strong academic program.	5.30	4.95 ↓
Q25	I think attending Wayne State University could help me reach my career goals.	5.37	4.52 ↓

Statistically significant (p<0.05)



# Exploring Statistically Significant Findings

## Questions from Steering Committee:

- **Were results due only to 12th graders?**
  - Considering the 12 items that were statistically significant for students overall,
    - For both 10/11th and 12th graders, the items changed in the same directions as the overall trend, though they were not necessarily statistically significant for the 10/11<sup>th</sup> grade subgroup.
- **Were there differences based on high school or free/reduced school lunch status?**
  - For three items, there were statistically significant differences by whether or not students attended school at one of the C<sup>2</sup> Pipeline afterschool program sites.

# Overall Statistically Significant Findings

		Overall		12th Graders		10th/11th Graders	
		Pre	Post	Pre	Post	Pre	Post
Q2	Hard time breaking away from family	2.01	2.40	1.98	2.20	2.04	2.57
Q4	Talk about my college/career with family	5.49	5.15	5.53	5.23	5.46	5.09
Q7	Understand/plan to complete FAFSA	4.40	3.91	4.83	4.35	4.02	3.52
Q10	Want to live on campus	5.06	4.62	4.85	4.73	5.24	4.52
Q12	Will need better study habits for college	4.81	5.16	4.75	5.18	4.87	5.15
Q14	Chosen a major and confident about it	4.88	4.26	5.05	4.55	4.72	4.00
Q16	Found at least one suitable career	5.40	5.04	5.56	5.33	5.26	4.78
Q19	Understanding of working in STEM/Health career	3.76	4.17	3.85	4.35	3.67	4.02
Q21	Can work well in team	5.40	5.06	5.43	5.03	5.37	5.09
Q22	Teamwork is important in STEM/Health	5.51	5.30	5.53	5.38	5.50	5.24
Q24	WSU has strong academics	5.30	4.95	5.38	5.25	5.24	4.70
Q25	WSU could help with career goals	5.37	4.52	5.55	4.78	5.22	4.30

## Statistically Significant Findings for 10<sup>th</sup>/11<sup>th</sup> Graders

- After the program, rising 10<sup>th</sup> and 11<sup>th</sup> grade students, had:
  - more agreement that they had a hard time breaking away from family;
  - less agreement that they talked with their families about colleges and careers;
  - more agreement that they had the financial resources for college;
  - less agreement that they wanted to live on campus;
  - less agreement that they had chosen a major and that they had found at least one suitable career;
  - less agreement that teamwork is important in solving health/STEM problems; and
  - less agreement that WSU had a strong academic program and would help them reach their goals.

# Statistically Significant Findings for 10th/11th Graders

		Average Response (N=46)*		
		Pre	Post	
Q2	I am having a hard time breaking away from my family, and attending college will make the situation worse.	2.04	2.57	↑
Q4	My family and I talk about my college and career plans.	5.46	5.09	↓
Q8	I have the financial resources that I need to go to college.	2.80	3.43	↑
Q10	I want to live on campus during my college years.	5.24	4.52	↓
Q14	I have chosen a major and I feel confident about my decision. *(N=43)	4.72	4.00	↓
Q16	I have found at least one career that seems to fit well with my personality and interests.	5.26	4.78	↓
Q22	Teamwork is important in solving health/STEM problems.	5.50	5.24	↓
Q24	I think Wayne State University has a strong academic program.	5.24	4.70	↓
Q25	I think attending Wayne State University could help me reach my career goals.	5.22	4.30	↓

Findings were statistically significant (p<0.05)



## Statistically Significant Findings for 12th Graders

- After the program, rising 12<sup>th</sup> grade students, had:
  - less agreement that they talked with their families about colleges and careers;
  - less agreement that they knew how to apply for colleges;
  - less agreement that they had chosen a major;
  - more agreement that they had an understanding of working in a health/STEM career;
  - less agreement that they could work well in a team; and
  - less agreement that WSU would help them reach their goals.

Findings were statistically significant ( $p < 0.05$ )

## Statistically Significant Findings for 12<sup>th</sup> Graders

		Average Response		
		Pre	Post	
Q4	My family and I talk about my college and career plans. (N=40)	5.53	5.23	↓
Q5	I know how to apply for colleges. (N=39)	4.51	3.79	↓
Q14	I have chosen a major and I feel confident about my decision. (N=38)	5.05	4.55	↓
Q19	I have an understanding of what it is like to work in a health/STEM career. (N=40)	3.85	4.35	↑
Q21	I can work well with others as a team. (N=40)	5.43	5.03	↓
Q25	I think attending Wayne State University could help me reach my career goals. (N=40)	5.55	4.78	↓

Findings were statistically significant ( $p < 0.05$ )





## Statistically Significant Differences Between Subgroups

- A few items had statistically significant differences between students, based on their high schools:
  - Q6 – I want to live on campus during my college years.
  - Q27 – Midtown Detroit has a lot to offer to students.
  - Q28 – There are many great activities in Detroit for young people.
- For the latter two items, those who attended a school that was a C<sup>2</sup>P afterschool site had *more* agreement with this statement after the program, while those who did not had *less* agreement.

	High School								
	Overall (N=86)			Not C <sup>2</sup> P Site (N=37)			C <sup>2</sup> P Site (N=46)		
	Pre	Post	Change	Pre	Post	Change	Pre	Post	Change
Q6	5.06	4.62	-0.44	4.97	4.11	-0.86	5.15	4.96	-0.19
Q27	5.10	4.92	-0.18	5.19	4.68	-0.51	5.04	5.11	+0.07
Q28	4.99	4.95	-0.04	5.24	4.70	-0.54	4.76	5.13	+0.37

## Statistically Significant Findings 2014 to 2017

Items that had statistically significant changes from pre- to post-program for at least two years:

	2014	2015	2016	2017
Confidence in the decision to go to college	n/s	↓	↓	n/s
Breaking away from family will be more difficult in college	n/s	↑	n/s	↑
Understanding what it is like to work in health career	↑	↑	↑	↑
Being unsure of the steps to become a health professional	↓	n/s	↓	n/s
Liking working on a team	↓	n/s	n/s	↓

Percent agreeing statistically significantly **increased** ↑ or **decreased** ↓ from pre- to post-program.

**n/s**: not statistically significant

# Results from Parent Survey

## Parent Surveys

Students Completed Post-Program Survey	Matched Parent Responses
86	78

- 89 students completed the program:
  - **97%** (n=86) completed the post-program survey.
  - **88%** (n=78) of their parents also gave feedback.

Overall feedback was positive. Written comments included:

- ❖ *I so appreciate this chance my daughter was given. When speaking with my child she was very pleased and so was I. I thank you all once again.*
- ❖ *Thank you for an amazing and life changing opportunity.*
- ❖ *C2 Pipeline is a good venture and should be continued.*
- ❖ *More staff involved with teams working together ... students need to have directions and accountability for not engaging.*

## Parent Survey Instrument

- A series of statements focusing on the following areas:
  - Expectations and preparedness
  - Wayne State campus and Detroit/Midtown
  - The C<sup>2</sup> Warriors College Experience
- Parents were asked to indicate, on a scale of 1 to 6, how much they agreed or disagreed with each statement.



- Questions about the information that parents believed students gained during the program, information students still needed, and information parents still needed.
- Questions about whether the program changed the parents' impressions of Wayne State University and Detroit or Midtown.

## Highlights from the Parent Survey Results

Parents viewed the IPE program positively. The vast majority agreed that:

- the program helped their child better understand day-to-day college life (96.1%; n=73);
- the program helped their child better understand the academic requirements of college (93.4%; n=71); and
- after the program, their child was more ready for college (96.0%; n=72).

## Highlights from the Parent Survey Results

Parents had favorable impressions of Wayne State. The vast majority agreed that:

- WSU has a strong academic program (98.7%; n=77);
  - attending WSU would benefit their child (98.7%; n=77); and
  - they feel comfortable walking around WSU (93.6%; n=73).
- 
- **86.7%** of parents (65 out of 75) reported that the program improved their impression of Wayne State.
  - **77.6%** (59 out of 76) reported that the program improved their impression of Detroit or Midtown.

## Highlights from the Parent Survey Results (cont.)

While **nearly all** parents reported that they expected that their child would go to college (76 out of 78) and that college was the right thing for them (73 out of 77),

- **34.7%** (25 out of 72) worried their child was not academically ready for college;
- **42.3%** (33 out of 78) reported that they did not know about scholarships to help pay for college expenses; and
- **64.1%** (50 out of 78) felt they did not have the financial resources to send their child to college.



# Conclusions and Recommendations

## Findings from Survey Results

Findings from the evaluation surveys indicated that the program was reaching several of its expected outcomes:

- Students reported:
  - Greater understanding of what it is like to work in a healthcare career; and
- Parents reported:
  - High ratings for the IPE program; and
  - Improved impressions of Wayne State and of Detroit or Midtown.

## Opportunities Identified by Evaluation

The program also has opportunities to refine operations:

- After the program, participants felt less prepared to succeed in college and select a career path, and less interest in working in teams.
- Participants also had had a lower perception of WSU and were less interested in attending.

Staff can consider:

- investigating whether including younger students changed the experience of the rising seniors and how to address those; and
- how to support younger students:
  - as they transition to independence;
  - to increase both their academic skills and confidence in their abilities; and
  - to envision how to build on their work in the IPE program to their efforts in high school and beyond.

## Opportunities Identified by Evaluation (cont.)

- To help address parent concerns students are not academically ready for college and parent perception of additional information needed by students, staff can:
  - continue working with the students in the afterschool programs, covering topics such as:
    - personal finance and budgeting;
    - college costs and scholarships; and
    - careers and success after college.
  
- Parents also identified information they felt that they still needed, such as choosing a good college for their child's needs and goals, understanding the costs of college, applying for financial aid, and scholarships.
  - C<sup>2</sup> Pipeline could consider supplementing the afterschool program with a parent education component to address these areas.

## Opportunities Identified by Evaluation (cont.)

- Finally, over four years of the IPE program, the evaluation has not identified a set of items that consistently has statistically significant differences before and after the program.
  - To better capture the effects of the program, beginning with the 2018 camp, the evaluation team will explore the creation of composite scores for the survey items.

# Detailed Results from Student Pre- and Post- Program Surveys

# Preparing for College

		Average Response (N=86)	
		Pre – Program	Post- Program
1.	I am confident that my decision to go to college is the right thing for me.	5.55	5.40 ↓
2.	I am having a hard time breaking away from my family, and attending college will make the situation worse. *	2.01	2.40 ↑
3.	I have some serious misgivings about going to college. <sup>1</sup>	2.64	2.34 ↓
4.	My family and I talk about my college and career plans. *	5.49	5.15 ↓

\* statistically significant (p<0.05)

<sup>1</sup>For this item N=47. Item was not answered on pre by 41 individuals.



## Preparing for College

		Average Response (N=86)		
		Pre – Program	Post- Program	
5.	I know how to apply for colleges.	4.05	3.86	↓
6.	I know the admission requirements for the colleges I want to attend.	3.97	3.95	↓
7.	<b>I understand the FAFSA process and plan to complete it.*</b>	<b>4.40</b>	<b>3.91</b>	↓
8.	I have the financial resources that I need to go to college.	3.12	3.35	↑
9.	I know about various scholarships that could help me pay for college.	3.86	4.13	↑

\* statistically significant (p<0.05)





## Preparing for College

		Average Response (N=86)	
		Pre – Program	Post- Program
10.	<b>I want to live on campus during my college years.*</b>	<b>5.06</b>	<b>4.62</b> ↓
11.	I feel prepared to deal with all the new experiences that come with being in college.	4.74	4.76 ↑
12.	<b>I will need better study habits than I have right now so I can do well in college.*</b>	<b>4.81</b>	<b>5.16</b> ↑
13.	I am convinced that I will eventually master concepts in my academic courses that might be difficult to understand at first.	5.27	5.17 ↓

\* statistically significant (p<0.05)



## Career Choices

		Average Response (N=86)	
		Pre – Program	Post- Program
14.	<b>I have chosen a major and I feel confident about my decision. *<sup>1</sup></b>	4.88	4.26 ↓
15.	I am very confused about what career I should have.	2.41	2.64 ↑
16.	<b>I have found at least one career that seems to fit well with my personality and interests. *</b>	5.40	5.04 ↓
17.	I have made a firm decision to enter a certain career and have begun planning my life around that decision.	4.45	4.26 ↓

\* statistically significant (p<0.05)

<sup>1</sup>For this item N=81.



# Knowledge About Health Careers

		Average Response (N=86)	
		Pre – Program	Post-Program
18.	I am not sure what steps I would need to take to become a health professional.*	3.40	3.34 ↓
19.	<b>I have an understanding of what it is like to work in a health career.*</b>	<b>3.76</b>	<b>4.17 ↑</b>

\* statistically significant (p<0.05)



## Thoughts On Teamwork

		Average Response (N=86)	
		Pre – Program	Post- Program
20.	I like working in a team with people. <sup>1</sup>	4.62	4.44 ↓
21.	<b>I can work well with others as a team.*</b>	<b>5.40</b>	<b>5.06 ↓</b>
22.	<b>Teamwork is important in solving health problems.*</b>	<b>5.51</b>	<b>5.30 ↓</b>
23.	Health care is better when there are people from different fields working together.	5.28	5.31 ↑

\* statistically significant (p<0.05)

<sup>1</sup>For this item N=55. Items was not answered on pre by 33 individuals.



## Wayne State Campus And Detroit

		Average Response (N=86)	
		Pre – Program	Post- Program
24.	<b>I think Wayne State University has a strong academic program.*</b>	5.30	4.95 ↓
25.	<b>I think attending Wayne State University could help me reach my career goals.*</b>	5.37	4.52 ↓
26.	I feel comfortable walking around the Wayne State campus.	4.94	4.86 ↓
27.	Midtown Detroit has a lot to offer to students.	5.10	4.92 ↓
28.	There are many great activities in Detroit for young people.	4.99	4.95 ↓
29.	I enjoy spending time in Detroit.	5.01	4.91 ↓

\* statistically significant (p<0.05)



## Percentage of Students Who Listed Wayne State as One of Top Choices for Colleges

	Pre-Program	Post-Program
Wayne State as first choice	39.6% (n=36)	32.6% (n=28) ↓
Wayne State as one of the top three choices	65.9% (n=60)	67.4% (n=58) ↑

## Percentage of Students Who Planned for a Field in STEM/HEALTH

	Pre-Program	Post-Program	
STEM/Health Major	82.4% (n=75)	73.3% (n=63)	↓
STEM/Health Career	62.6% (n=57)	58.1% (n=50)	↓

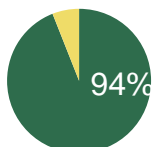
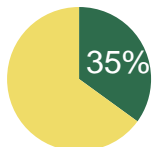
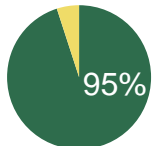
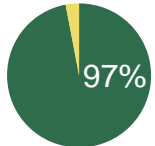
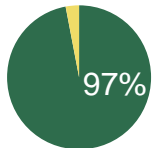
# Detailed Results from Parent Surveys



# Expectations And Preparedness

Question		Average Response
1.	I expect that my child will graduate high school on time.	5.81
2.	I expect that my child will go to college.	5.76
3.	I feel that college is the right thing for my child.	5.62
4.	I worry that my child is not ready for college academically.	2.61
5.	My child and I talk about college and career plans.	5.40

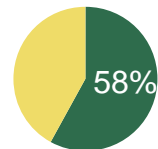
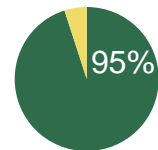
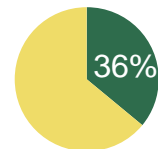
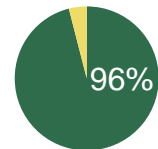
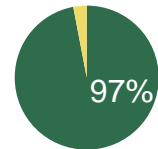
■ Agree  
■ Disagree



# Expectations And Preparedness

Question		Average Response
6.	I know what kinds of things I can do to help my child be ready for college.	5.31
7.	I am helping prepare my child for college.	5.46
8.	Our family has the financial resources to send my child to college.	3.09
9.	I plan to complete the FAFSA (Free Application for Federal Student Aid) with my child.	5.46
10.	I know about various scholarships that could help our family pay for my child's college expenses.	3.65

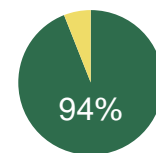
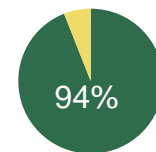
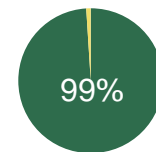
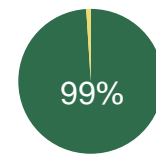
■ Agree  
■ Disagree



# Wayne State Campus and Detroit

Question	Average Response
11. I think Wayne State University has a strong academic program.	5.44
12. I think attending Wayne State University would benefit my child.	5.29
13. I feel comfortable walking around the Wayne State campus.	5.03
14. I feel that my child is safe around the Wayne State campus.	4.99

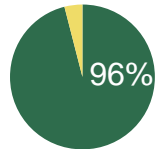
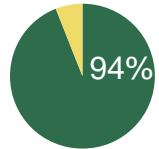
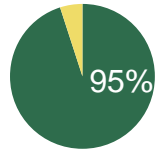
■ Agree  
■ Disagree



# Wayne State Campus and Detroit

Question	Average Response
15. Midtown Detroit has a lot to offer to students.	5.08
16. There are many great activities in Detroit for young people.	4.87
17. I enjoy spending time in Detroit.	5.15

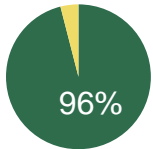
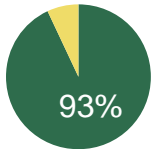
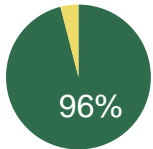
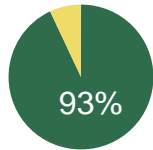
■ Agree  
■ Disagree



# C<sup>2</sup> Pipeline Warriors College Experience

Question	Average Response
18. My child and I have talked about their time at the C2 Pipeline Warriors College Experience.	5.13
19. I think the C2 Pipeline Warriors College Experience helped my child better understand day-to-day college life.	5.30
20. I think the C2 Pipeline Warriors College Experience helped my child better understand the academic requirements of college.	5.25
21. After the program, I feel like my child is more ready for college.	5.20

■ Agree  
■ Disagree



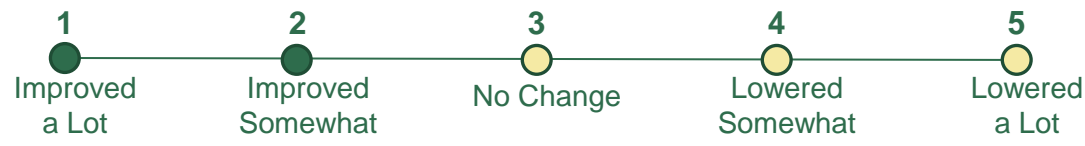
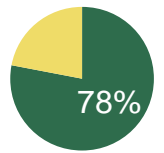
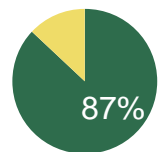
## C<sup>2</sup> Pipeline Warriors College Experience

	<b>The C<sup>2</sup> Pipeline Warriors College Experience has helped my child better understand...</b>	<b>I feel my child still needs more information on...</b>	<b>I feel that I still need more information on...</b>
Applying to colleges	66%	30%	14%
Choosing a good college for his or her needs and goals	63%	28%	11%
Understanding the costs of college	46%	41%	16%
Scholarships	43%	43%	20%
Applying for financial aid	42%	46%	21%
Planning for career and success after college	61%	36%	18%

# C<sup>2</sup> Pipeline Warriors College Experience

	Question	Average Response
23.	How did the C <sup>2</sup> Pipeline Warriors College Experience change your impressions of Wayne State University?	1.47
24.	Has the C <sup>2</sup> Pipeline Warriors College Experience changed your impressions of Detroit or Midtown?	1.70

■ Improved  
■ No Change or Lowered



# Evaluation of the 2017 C<sup>2</sup> Pipeline College Warriors Experience



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