

## Elver Park Neighborhood Center (EPNC) & Theresa Terrace Neighborhood Center (TTNC) Class Impact Survey Report

In Spring of 2017, Maydm hosted introductory programming classes for students aged 11-15 at the Elver Park and Theresa Terrace Neighborhood Centers. In these classes students created their own websites using different programming languages including HTML, CSS and Javascript through Codepen.io.

We surveyed our students before and after the program to gauge the impact of our program on the students. Thirteen students completed the pre-survey, and 14 completed the post-survey. However, these numbers are not representative of all students who participated in the program. Some students participated infrequently, ended the program early, or joined the program at a later date. This prevented us from tracking all students individually throughout the course of the program.

### Impact

Students were asked to rate their confidence in programming (1), interest in continuing to learn about programming (2), understanding of coding and website design (3). Students were also asked to describe and choose from pre-selected descriptors to identify their feelings about computers (4) and career goals (5 & 6).

- (1) There was a 25% overall increase in confidence in programming as reported by students.
- (2) On a scale of 1 to 5, with 5 being most interested in programming, 64.3% of students indicated a rating of 3 or higher in the post-survey. *This question did not appear in the pre-survey.*
- (3) There was a 42.3% increase in students who claimed to know how to design their own website and a 19.2% increase in students who claimed to understand how coding works when creating a website.
- (4) The number of students that found computers and programming to be "useful" and "real" doubled in the post-survey.
- (5) There was a 49.4% increase in students that indicated they would definitely need to learn science and technology in order to pursue their dreams
- (6) There was a 30% increase in students who reported interest in a career in STEM

### Conclusion

Maydm's program created retained knowledge in at least 50% of the students about how to design and code a website. Before the program, interest in programming was present in approximately less than a quarter of the class. After the class, over half of the students expressed interest in learning more about programming and considering a career in STEM. Furthermore, more students seemed to consider computer science fun and real, suggesting that students came to understand the practical applications of computers.