## Overview

Coding the Coal Region was a year-long pilot program in which students and residents of Luzerne County in Northeastern Pennsylvania in grades 6-12 had the opportunity to increase their computer programming knowledge from college professors at no cost. The program was created and developed by Wilkes-Barre Connect, in partnership with the Pennsylvania Department of Community and Economic Development, and was funded by the Appalachian Regional Commission. The curriculum was provided by Codelicious and taught by professional instructors and professors from Penn State Wilkes-Barre. Coding the Coal Region (CTCR) is one component of the NEPA Works Pilot project along with the "Reimagining our Workforce" program. The results and outcomes of the Coding the Coal Region program were analyzed by The Institute for Public Policy and Economic Development.

## Goals

- Increase the computer programming skills in Northeast PA
- Provide students in grades 6-12 the opportunity to build basic computer programming foundations
- Offer pathways in graphic design, as well as web, game, and app development
- Expand the program to communities across Pennsylvania
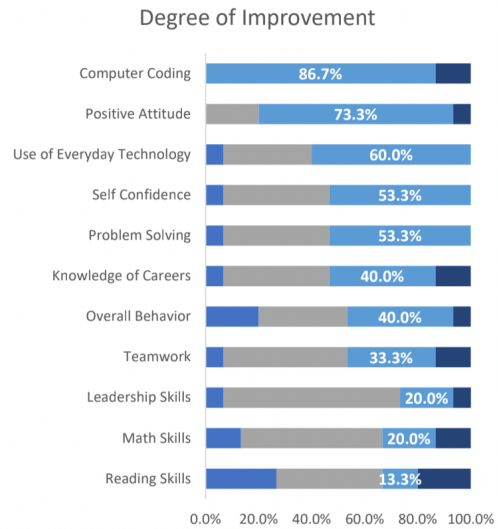
## Implementation

Instructors delivered 2 hours of Codelicious Computer Science Curriculum each week. Classes were delivered virtually, with no specialized software requirements for students. WB Connect provided students with no computer or internet access with alternative locations to participate in the classes.

# Results

## Student Feedback

- Every student who completed a post survey said they liked the coding class.
- Each said they would recommend the coding class to others who were also interested in coding.
- The aspects of the class that the students liked included learning to make video games and having discussions about job options.
- They enjoyed the opportunity to develop other fun games because they were able to find solutions and code it themselves.
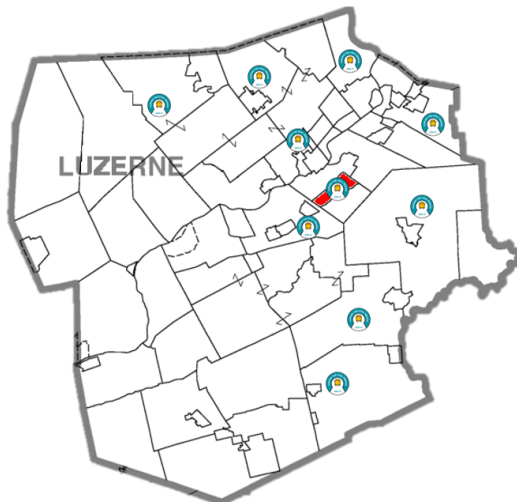
Degree of Improvement

| | |
|---|---|
| Computer Coding | 86.7% |
| Positive Attitude | 73.3% |
| Use of Everyday Technology | 60.0% |
| Self Confidence | 53.3% |
| Problem Solving | 53.3% |
| Knowledge of Careers | 40.0% |
| Overall Behavior | 40.0% |
| Teamwork | 33.3% |
| Leadership Skills | 20.0% |
| Math Skills | 20.0% |
| Reading Skills | 13.3% |

0.0%  20.0%  40.0%  60.0%  80.0%  100.0%

*The Institute for Public Policy and Economic Development - Coding the Coal Region Program Evaluation Report"

## Parent Feedback

- Kids were more excited for classes, took pride in their work, and showed an increased interest and knowledge of computers and gaming.
- The program was an opportunity for, "hands-on learning at an early age which would not have been possible otherwise."
- Children were able to make games and are more sure about their future career path following their time in the program.

## School District Participation Across Luzerne County

- Crestwood
- Dallas
- Hanover Area
- Hazleton Area
- Holy Redeemer
- Lake Lehman
- Pittston Area
- Wilkes Barre Area
- Wyoming Area
- Wyoming Valley West