



Instructor:

Mr. Meserve



Course:

Python 2

## Driving Question

What is the meaningful problem to be solved or question to be answered that frames the project?

How do we create a single player game vs. computer Tic Tac Toe game?

## Authenticity & Sustained Inquiry

How does this project involve real-world context, tasks and tools, impact, or personal issues in the students' lives?

With the rise of tech companies in the Research Triangle, this PBL is more pertinent than ever to ensure their marketability for potential jobs in the region. Students will end this PBL with a fundamental understanding of coding to not only make them College & Career Ready but attractive to employers.

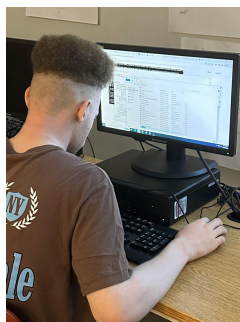
## Public Products with Student Voice & Choice

What were some products students chose to make, and how did they share their products outside of the classroom?



Interested in seeing more past and current projects? Scan the QR Code to see!

## Tic-Tac-Toe and Snake Games



## Teacher Reflection

Teachers reflect on the PBL process, the quality of student work, and any changes to make for future use.

"The students explored the options for a single player versus computer game, such as tic-tac-toe or snake. After finishing Tic-Tac-Toe, students coded in a timer that would skip the player's turn if no selection was made within 5 seconds. Snake was a little more difficult because they had to code a pop-out screen for the game to begin and manipulate which keys would be used for the snake's directions."

## Student Reflections

Students reflect on the learning, the effectiveness of their inquiry and project activities, and obstacles that arose and strategies for overcoming them.

- "I learned how to use different modules I didn't even know existed."
- "Building a game will be useful once I enter my program area."
- "I can better adjust to what needs to be done and fix issues by troubleshooting prior to asking."
- "I was able to get a better understanding for Python."
- "I realized the best way to learn something is by doing it."
- "I understand the importance of the way to manipulate how a list and loop works and how it functions to create a playable game."

## Noted Skills Gained

Program Languages

Understanding Flow Charts

Problem-Solving

Large-Scale Coding Manipulation