

**Student Teaching Practicum in High School Biology at Worcester Technical High School
Digital-Portfolio**

An Interactive Qualifying Project
Submitted to the faculty of
Worcester Polytechnic Institute
In partial fulfillment of the requirement for the
Degree of Bachelor of Science

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<https://sites.google.com/view/student-teaching-iqp-pachecop/home>

Abstract

For my Student Teaching Practicum in Biology, I completed a fifteen-week-long student-teaching experience at Worcester Technical High School in Worcester, Massachusetts, during the spring semester of 2021. While completing my Interactive Qualifying Project (IQP), I also worked towards earning my Massachusetts's Initial Teaching License in high school biology by demonstrating proficiency in the seven essential Candidate Assessment of Performance (CAP) elements. These elements include Subject Matter Knowledge, Well-Structured Lesson Plans, Adjustments to Practice, Meeting Diverse Needs, Safe Learning Environment, High Expectations, and Reflective Practice. Additionally, I focused on improving my skills in culturally responsive teaching, applied learning science principles, and project-based learning during remote and hybrid learning. Included in the e-portfolio are sections displaying lesson plans, presentations, homework assignments, various assessments, student feedback, and reflections of growth in these areas that support my development as an educator.

Acknowledgments

Before diving deeper into this section, I would like to acknowledge that my Teaching Practicum in Biology (Student Teaching) was done in Worcester, Massachusetts, the traditional lands of the Nipmuc Indigenous People, and pay my respect to elders both past and present. I acknowledge that we live, learn, work, and teach on this ancestral homeland to the Nipmuc People who have stewarded this land throughout the generations; thank you.

This semester has been the most incredible experience of my college career! To no surprise, this semester has also been the hardest. Nothing could have prepared me for this. No one predicted this pandemic. No one predicted that educational campuses worldwide would be closed, and no one could have predicted the largest politically, racially, and socially charged movements in global history. During this time period, we underwent one of the most important elections in U.S. history, Trump V. Biden. We witnessed the horrors of innocent black lives being taken at the hands of police #BlackLivesMatter. We witnessed the rights of LGBTQ+ people be silently pulled back. We are also experiencing an urgent need for climate change advocacy. I acknowledge these movements because this was the political climate my students and I are currently living in.

Why was this the greatest semester of my collegiate experience? It was because I finally discovered the career path I want to follow post-undergraduate graduation. My time in the classroom has made me aware that there is no other occupation I can imagine myself having. I owe this realization to many. Primarily, I owe it all to my former students. They were my rocks. They held me together when I wanted to throw in the towel. They kept me motivated to give them everything I got. I am extensively proud of them, and I hope they are of themselves too. In the grand schemes of things, they have taught me much more than I have taught them. Without my students' extreme perseverance, participation, and determination, I would have never discovered the joys of teaching. To all my former students, thank you for being yourself.

I could not have succeeded without the support of my close friends and family. Thank you, Mom, Dad, and Jonathan, for always believing in me whenever I traveled home to de-stress. Thank you, Johanna, Katie, Demi, Anna, Kyla, Syreneti, Diana, Carley, Megan, Josue, Jay, Vivian, Danielle, and the brothers of Sigma Pi Gamma-Iota, for your words of support and affirmation during this rough journey. I could not have done this without your support.

I would also like to thank teaching cohort members Ben Petkie and Em Beeler. I could not have picked a better group of people to endure this journey with. We laughed, we cried, and we conquered being students and teachers during a global pandemic.

I would also like to thank my Program Supervisor, Jackie Bonneau, and Teaching Program Director, Shari Weaver, for your continuous words of wisdom, advice, and guidance. I could not have asked for better advisors.

Last but certainly not least, I would like to thank my Supervising Practitioner, Jocelyn Coughlin. Our pairing could not be paired any better. Thank you for being a great friend and even better mentor. There are no words in written language that can describe the amount of gratitude I have for you. You and the students have truly changed the path of my life. I owe my discovery for the love of teaching to you. You have changed the trajectory of my life in the most extraordinary way possible. Before embarking on this tedious and unparalleled experience, I had minimal

intentions of becoming a teacher. Now I know what I was born to do. I was born to teach, love, and inspire. I can only hope to one day become as fabulous as you.

I am a future educator thanks to all of you!

[Background of Education](#)

Every Student Succeeds Act
Massachusetts Ed Reform Act

[Worcester District Information](#)

Worcester Technical High School Information

[Courses Instructed](#)

[Essential Elements of CAP](#)

Well-Structured Lesson Plans
Safe Learning Environment
Meeting Diverse Needs
Adjustment to Practice
High Expectations
Reflective Practice

[WPI Education](#)

Teaching Method Related Coursework
Biological Science Coursework
Psychological & Cognitive Science Related Coursework
Undergraduate Research

[Culturally Responsive Teaching](#)

[Applied Learning Sciences in the Classroom](#)

[Instructional Material](#)

Student Work Samples

[More About Me](#)

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[Acknowledgments](#)

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