

Ng Ee Noch

2023 Fulbright Distinguished Awards in Teaching Program for International Teachers To A World Unknown

On 14 August 2023, I left my family, friends, and sunny Singapore to embark on an epic journey across the Pacific Ocean to the United States of America. I took a big step out of my comfort zone to begin a once-in-a-lifetime learning experience and I am eager to share these experiences with you, so you can live vicariously through me.

"Life begins at the end of your comfort zone" ~ Neale Donald Walsch

A Whole New World

The moment I stepped into Pittsburgh International Airport, I was greeted with a warm smile and a hug from Dr. Michele Petrucci. She was not only our program coordinator, but she would also soon become a motherly figure, looking after all seventeen of us during our four-month stay. As the sixteen other Fulbright scholars arrived one by one, the initial handshakes quickly blossomed into an unforgettable bond of friendship. Despite hailing from various countries around the world, with their own unique and fascinating cultures, teaching experiences, and backgrounds, we all shared a profound dedication to education and our students. We did more than just learn together; we also shared meals, played, and celebrated festivals as a group. I am truly grateful to have crossed paths with such extraordinary people. The friendships we forged are sure to last a lifetime.



Celebrating Mexico's Independence Day



*Seventeen Fulbright scholars from ten different countries
(Brazil, Greece, India, Indonesia, Mexico, Philippines, Senegal, Singapore, Taiwan and Uganda)*

Spending four months in the Indiana, PA, gave me a valuable opportunity to deepen my understanding of a country I had mainly known through media stereotypes. One of the most striking contrasts I noticed was the diversity of the demographics. Unlike Singapore's multi-racial and multi-cultural society, Indiana, PA, a small county with smaller immigrant population, is predominantly white. The lifestyle pace in Indiana, PA, also stood in stark contrast to that of Singapore. There, people seemed more relaxed and less rushed, and perhaps that allowed them to be more tolerant to the different paces of life; the drivers in Indiana are a lot more patient than those in Singapore – you don't hear the sound of angry car honks!

Food also presented a whole new world for me. Unlike Singapore's diverse variety of international flavours, food options in the US are often limited to restaurants and fast food, heavily featuring fares like burgers and pizzas. I lost count of how many pizzas, burgers and

fries I had over the course of my stay. I learned that the Americans are fond of carbs, sweets, and cheese! Fortunately, there were some Asian restaurants, offering a taste of home amidst the predominantly American diet. I dearly missed the rich variety of Singaporean dishes like rojak, satay, laksa, and of course, my wife's home-cooked food.



Carbs galore!

Education Across the World

Every Monday, we would attend the Fulbright Seminar, conducted by Dr. Stephan Schaffrath and Mrs. Atia Rasul, to gain deeper understanding of the American education system and the systems of my Fulbright colleagues' home countries. One of the assignments was to understand through the book 'Rewiring Education' by John D. Couch, Apple Inc.'s first Vice President of Education, what is needed in education to prepare our children to be future-ready. Many of his

thoughts and ideas resonated strongly with us and we agreed that there is an “urgent need to think differently about how we motivate, train, develop, measure, and evaluate our children and the extraordinary people who teach them. And it means understanding and unlocking the unlimited potential for children to learn and succeed” (Couch, 2018).

Understanding and unlocking the unlimited potential for children to learn and succeed.

Every Thursday, we would attend the Technology Workshop conducted by Dr. Jacqueline McGinty and Dr. Roger Briscoe who not only shared with us various practical technology tools for the classroom but also how to use instructional technology in a pedagogically-sound manner. The workshop helped us to better understand the theory and practical ways to integrate technology into education.



Sharing about technology in Singapore

Each of us was also tasked with sharing how we use technology in our home countries. However, many of the Fulbright scholars talked about the lack of technology in their classrooms instead. In many of the schools where they teach, a projector is considered a luxury item. Although they are aware of the importance of technology, especially during the height of the pandemic, the lack of resources prevents them from utilizing such tools with their students.

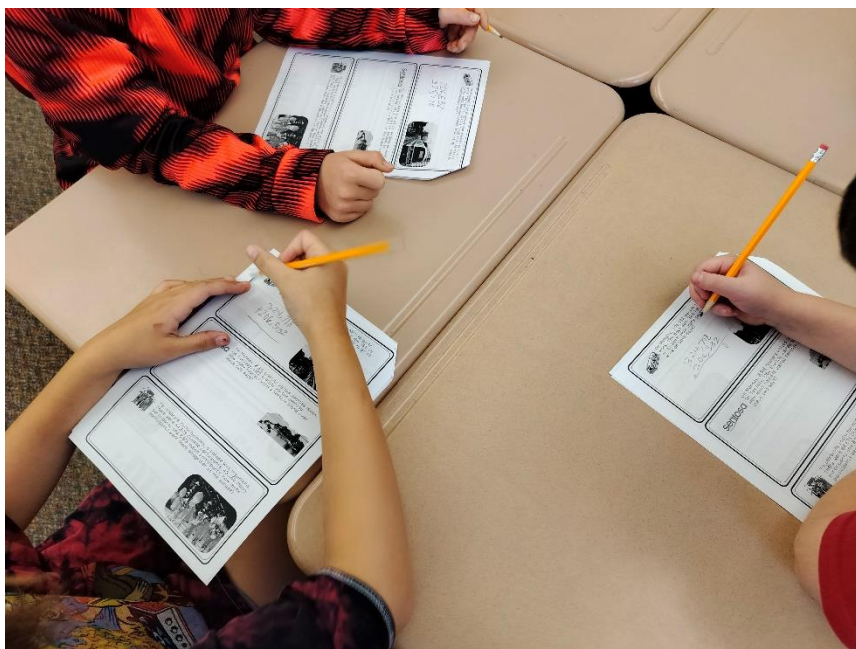
We are truly blessed to have access to an abundance of resources and the latest learning devices in Singapore! As the cliché saying goes, ‘with great power comes great responsibility’.

Since we have the power of technology readily available at our fingertips, it is our responsibility to create a participatory, connected, and reflective classroom to nurture future-ready learners.

My goal is to help teachers not just in Singapore but all around the world harness the immense power of technology to transform education. This way, we can better prepare our students for a world transformed by technology.

Stepping into the World of Students

“Today’s Wednesday, and who do we have with us every Wednesday?” asks my partner teacher, Mrs. Lisa Black. “Mr. Ee Noch!” comes the enthusiastic reply from her 4th-grade students.



Students solving Math word problems with a Singaporean twist!

Teaching children has always been my passion, so walking into class every Wednesday morning to see these bright-eyed and bushy-tailed children was an experience I will always cherish. I even had the chance to co-teach with my partner teacher using the Station

Rotation method! Three stations

were set up for students to learn how to add numbers up to 10,000. Mrs. Black managed one station, I took charge of the second, and students worked independently at the third station. At my station, students had to solve math word problems with a twist. The word problems were all based on Singapore's context, e.g., involving durians, which piqued the students' curiosity.

There were many questions about the foreign, spiky fruit. We had an amazing time simultaneously learning about Math and Singaporean culture, which truly brought Math to life!

Sharing our home country's culture and practices with the students at the schools we visited was another opportunity we had as Fulbright Scholars. A part of me wished that I could bring such an experience back to my students in Singapore!



Cultural sharing at Eisenhower Elementary School

Teaching in the United States presents its own set of challenges, much like the profession does in countries around the world. One such challenge is the lengthy teaching hours. Mrs Black's scheduled curriculum hours run from 8:15 a.m. to 3:30 p.m. with only a 30-minute lunch break and a 40-minute planning period. Despite teaching for long hours every day, Mrs. Black always comes in with a wide smile and a warm hug for her students. She also makes it a



Elementary Fulbright scholars with our partner teachers

point to ensure that lessons are fun and interesting for her students. Her dedication and love for her students are truly admirable, and it's something I will strive to emulate.

The Local's World

I was paired with Bill and Jan Waryck, my Friendship Hosts, to help me immerse in the



Catching salamanders with Bill

American culture. They were really welcoming, making me feel like family. We had meals together and I spent Thanksgiving with them, giving me a real taste of American life and traditions.

As a retired high school biology teacher, Bill continues to show passion in teaching and nature. He took me and other Fulbright scholars on frequent excursions to parks and places where nature thrives. These trips were simple yet profoundly enriching. On one occasion, we visited Blue

Spruce Park for a bird-feeding session. The experience was exhilarating. We stood still and waited patiently for the birds to gently approach and perch on our hands. They were pecking eagerly at the nuts that Bill had meticulously prepared.

Bill's love for nature and his eagerness to share his knowledge served as a reminder that educators never really retire; their classrooms just become bigger. I am incredibly lucky to be able to learn from Bill. These adventures are more than just outings; they are enriching experiences that have deepened my appreciation for nature and its wonders.

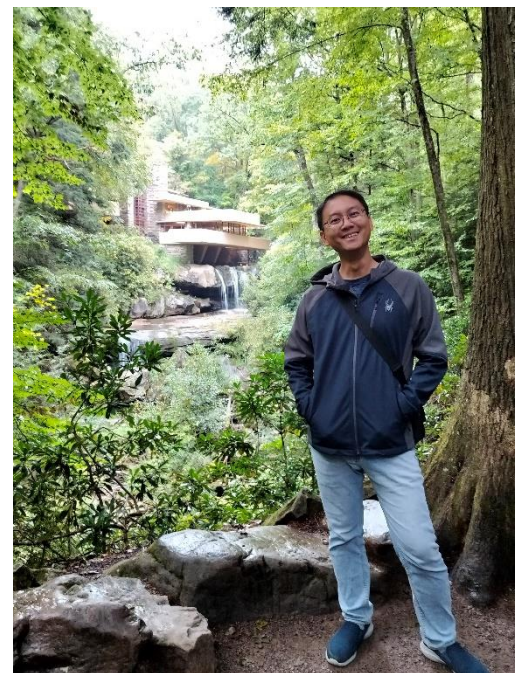
Educators never really retire; their classrooms just become bigger.



Bird feeding with Bill and fellow Fulbright scholars. Try to spot the bird on my hand!

Besides outings with my Friendship Hosts, I also went on numerous cultural excursions organised by our host university, Indiana University of Pennsylvania (IUP). These excursions were eye-opening and jaw-dropping. I experienced watching live football and baseball games, shopped at the local farmer's market, and witnessed the majestic Niagara Falls.

One of my cultural visits was to Fallingwater, a journey into architecture harmonising with nature. Frank Lloyd Wright's design, perched over a waterfall and nestled in



Fallingwater - An architecture masterpiece seamlessly blending with nature.

Pennsylvania's woodlands, beautifully blends stone, glass, and flowing water. The ever-present

sound of the waterfall added a serene backdrop, illustrating Wright's brilliance in integrating a structure with its environment. This experience served as a reminder to appreciate and preserve nature's delicate balance.

The World of Academia

"DI with AI" was the slogan I had in mind for my research project, a crucial component of my Fulbright experience. All the Fulbright scholars selected a research topic that aligned with our academic expertise and educational needs of our home country. We were each mentored by a Faculty Advisor.

In my first conversation with Dr. Brian Sharp, my Faculty Advisor, I realised the potential of AI beyond differentiation in education. It could really alter how we design lessons more efficiently and effectively, and potentially unlock new learning opportunities for our students.

My focus shifted towards creating a prompt template to guide AI in generating lesson plans. The process was mind-blowing! My jaw literally dropped when I experienced the capabilities of AI when given the right prompts.

Dr. Sharp challenged me to turn my prompt template into a framework that can be presented to others. Eager and excited with the challenge, I developed my project into something bigger: the AI-Enhanced Lesson Design Process with a prompt framework, a rubric for assessing lesson plans, and additional prompts for follow-up. Dr. Sharp and I put together a proposal to illustrate the use of AI in lesson planning to other teachers at the International Society for Technology in Education (ISTE) 2024 Conference.

I reached out to educators in Singapore through the SgLDC Facebook group to test and gather feedback about the lesson design process. We formed a group, called the AIEd Planners. The group members learned and gave me valuable

feedback about the AI-ELD Process. Some even enacted the lesson generated by AI. One of the group members began to tweak the prompt template to make AI provide feedback on existing lesson plans. Their enthusiasm and vision for the potential of AI in education were both thrilling and uplifting to me. As AI continues to evolve, we will maintain our commitment to meeting and exploring the diverse ways AI can effectively support educators.

I even had the privilege of sharing the AI-ELD Process with Math educators at the Western Pennsylvania Mathematics Teaching and Learning Conference held at Indiana University of Pennsylvania on 14 October 2023, and my fellow Fulbright scholars at one of our Fulbright Seminars. These sessions helped me to improve my project and grow as a professional.

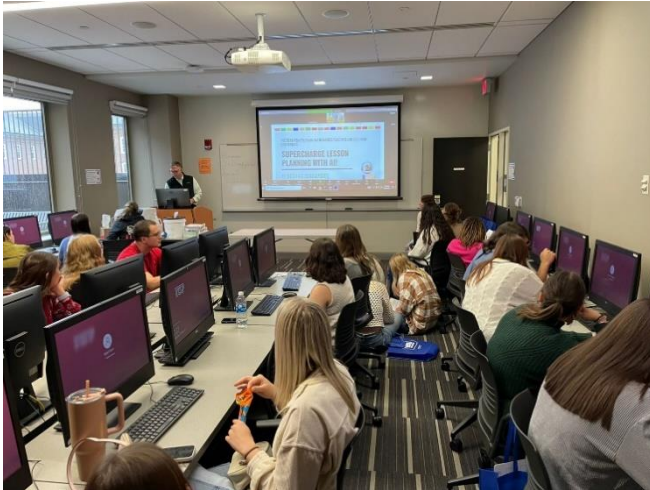
Sharing the AI-ELD Process through workshops or seminars is now a top priority, as I return to Singapore. I firmly believe that wisely embracing the affordances of AI can make us even more effective as teachers. My ongoing exploration will focus on how AI can design lessons better tailored to Singapore's educational landscape. This includes providing feedback on existing lesson plans and creating engaging resources such as stories, images, and videos.



Members of the AIEd Planners

I am also eager to co-present this project with other like-minded educators. To date, I have already submitted two proposals to present at local conferences, collaborating with two different members of the AIEd Planners.

Please feel free to contact me via email at ng_ee_noch@schools.gov.sg if you're interested in joining this exploration. I look forward to working with you!



Sharing at the Western Pennsylvania Mathematics Teaching and Learning Conference (left) and Fulbright Seminar (right)

During my Fulbright exchange, I had a chance to meet Aaron Sams, one of the pioneers of Flipped Learning ⁽¹⁾, along with Jonathan Bergmann. Flipped Learning is an innovative educational approach that involves students learning new content online, primarily through video lectures, followed by personalised guidance and interaction with teachers. I have followed their work for many years, and meeting Aaron in person was an incredibly memorable experience.



Aaron Sams with my fellow Fulbright scholars

⁽¹⁾Go to <https://flippedlearning.org> to find out more about Flipped Classroom

To a World Beyond

Although I felt a sense of sadness when the program was coming to an end, I carried with me a myriad of experiences that have transformed my personal and professional perspectives. With the ideas and insights gained in the US, I am confident to make a significant difference in the lives of my students and within the education community.



AI generated image to show that the Fulbright experience was a once in a lifetime experience for all of us.