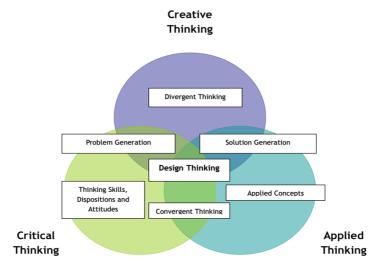
Mr Thomas Lim Kok Tiong

My Fulbright Experience

Prologue

Behind every story is another story: Therein lies the necessity of a prologue. Preceding my successful application for the Fulbright Distinguished Awards in Teaching Programme for International Teachers 2018/19, I was undergoing some of the finest moments in my teaching career: developing and implementing truly innovative programmes for the students in my school, and influencing and inspiring a remarkable team of teachers I lead to even greater heights. While language teaching and learning is my area of specialisation, much of the work I had been engaged in professionally had been on the development of thinking skills among young learners. Drawing on Sternberg's (1985) notions of 'Successful Intelligence', I had operationalised his notions of intelligence into thinking skills that can be taught in the classroom, and the main responsibility of my team is to design and conduct high-impact and high-engagement lessons for students in my school based on the model. One guiding principle and mantra that my team members and I follow is that we should never rest on our laurels. Good lessons must be replaced by even better ones, and even good programmes must dissolve or evolve into greater ones. No one has a monopoly of good ideas, and many innovative ideas and lessons in the school's Thinking Programme are the result of observations in schools, both local and overseas, and extensive review of literature. Having been educated in Singapore and the United Kingdom, and having travelled extensively across Europe and Asia in recent years for educational and professional purposes, the United States of America (US) thus emerges as the most important frontier worth exploring for the collection of insights to improve education in my school.



Thinking Skills based on Sternberg's notions of 'Successful Intelligence'

At many stages prior to my departure for the US, beginning from the application to the interview stages and even during the flight to the US, I researched extensively on the educational, political, economic, social and cultural conditions in the country, and I have repeatedly arrived at the same conclusion that it is, borrowing the great Argentinian novelist Jorge Luis Borges' metaphor, a Library of Paradoxes. To me, the country is by some distance the most innovative country in the world, leading the world in research in practically every known field, and developing the most desirable products and services in modern society. Its people lead the field from business, sciences, arts, medicine and humanitarianism, and a quick glance at my extensive personal library collection reveals that my collection of non-fictional texts was disproportionately authored by American academics. On the other hand, books by academics and laypeople, websites from multiple ends of the political spectrum, and reputable periodicals such as The New York Times and Time magazine, paint a rather bleak picture of the country, especially with regard to the educational and social landscapes. The standard of education is reportedly declining, as are the working conditions for many teachers, and well-being of students. Furthermore, there are claims of bipartisan politicking and questionable policies in the education and social sphere. The central question upon arriving at the Library of Paradoxes was how it rises above its failings to continue to be a symbol of hope, progress and success in the modern age. And the pursuit of the answer began.

Entering the Library of Paradoxes

Entering the United States was no easy feat. Due to a missed flight from delayed departure at Changi, the Singaporean Fulbrighters were placed on different flights and itineraries in order to arrive at Pittsburgh, where the representatives from our hosting university, Indiana University of Pennsylvania (IUP), were to meet us. Ten hours late and arriving close to midnight, I was the first Singaporean Fulbrighter to arrive and was met by the cheerful embrace of Dr Michelle Petrucci from IUP. Despite severe jet lag and luggage that was wandering in an airport carousel some 2000 kilometers away, the reassurance and smile of Dr Petrucci made everything appear far less grim. In fact, Dr Petrucci's attitude and demeanour are emblematic of most, if not all, of the academic and support staff I interacted with at IUP throughout the entire stint there. Their humility in spite of their accomplishments, their patience in spite of their busy schedule, their joviality in the face of difficulties and their willingness to perform the most mundane of tasks in spite of their seniority and standing were all qualities that stood out, quashing misgivings and false impressions I possessed prior to my arrival.



(From left to right) Singaporean Fulbrighters Ong Chin Meng, Valerie Baptist and I on the first day of orientation in our hosting university, Indiana University of Pennsylvania.

Encounters with the Other 'Legends'

Following a night at the airport hotel in Pittsburgh, I set off early the next morning for the university with the IUP staff together with the other Fulbrighters who were attached there. That was, and still is, probably one of the finest assemblies of teachers working around the world today. Listening to their professional and personal stories over breakfast and the two-hour drive to the university that morning leaves one with no other feeling possible but that of great awe. During the ride, I sat next to Noelline Nanyumba from Uganda, who works with mainstream students in her village school, but spends a large portion of her time in other villages teaching students with disabilities, whose parents keep them away from schools due to ingrained notions that their children do not belong to the society-at-large. Her work also includes educating these parents on the rights of their disabled children, and that none of them should be perceived as a 'curse' or a burden but children who deserve equal love and care, an ideal which goes against the cultural prejudices long held in her community. I had breakfast with Juliana Tando, a high school teacher from the restive province of Papua in Indonesia, where there are great distrust and frequent conflicts between the indigenous population and the federal government. While she is not a Papuan, her strong belief in the importance of education and her relentless efforts to empower her students through education has enabled her to earn the trust and the respect of both her students and the local community. Each time she spoke publicly or privately about the state of education in her province, tears would well up uncontrollably, and that is the extent to which she cares about the education of the Papuans. Another Fulbrighter in my mini-bus, Carlos Ortega from Mexico, shuttles between a rural school without functioning electricity and a school in the town every day. A highly-qualified and internationally-reputed teacher with impeccable qualifications, his commitment to uplift the most disadvantaged students in his community is most impressive, and his commitment to work in the rural education system means he had to teach at two schools just to make ends meet when lucrative offers from private schools are aplenty. Every single one of the 18 Fulbrighters at IUP, and I believe for the other 36 at the other two hosting universities, has an equally spectacular story to tell; and while all our contexts, cultures and experiences are different, what binds us is an equal commitment and belief in the importance of education.



Welcome Reception for Fulbrighters with the President and the Provost of IUP (centre, centre rear). Dr Michelle Petrucci, the coordinator of the Fulbright Programme at IUP, is in red (front).

Let the Learning Begin

Barely minutes after we dropped our luggage (or what was left of it) off at our housing, our first seminar began. The intensity of the learning during the Fulbright programme cannot be underestimated, and every workshop was highly interactive and engaging. Besides the two-weekly Fulbright seminars where we learnt about and discussed education issues around the world, all the Fulbrighters underwent a 'Technology in Education' workshop weekly where we discovered the use of high-engagement technological tools to aid our students' learning. Furthermore, each Fulbrighter audited two undergraduate or graduate level

courses in the university related to our areas of interest or inquiry project. I audited a course on 'Reading Diagnostic and Remediation', which is closely linked to my professional work as a Senior Teacher in English Language at my school, and a course on 'Critical Analysis', which formed part of my inquiry project on the development of thinking skills.



Typical high-engagement learning activity during a Fulbright seminar



Sharing about Singapore's Applied Learning Programme during the Fulbright seminar

As part of our weekly teaching experience and professional development programme, all the Fulbrighters were assigned to a high school in the local district for the first half of the programme, and to an urban school in the city of Pittsburgh about an hour and a half's drive away for the second half of the programme. As a primary school teacher, I also wanted to explore how teaching and learning were conducted at the elementary school, and one local elementary school allowed me to observe its after-school language learning activities on Mondays and mentor their trainee teachers on enhancing language learning in the school.

Given all the courses and seminars, as well as the school teaching experiences that we had to undertake, and the enormity of my inquiry project, time management and discipline were vital to the successful completion of the programme and for me to maximise the learning opportunities. Extensive reading, weekly assignments, research notes and preparation of teaching resources had to be juggled at the same time.

Thus, a typical week's schedule for me was as follows:

Day/Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Morning	Fulbright	Faculty	School	Self-	Fulbright	Cultural
	Seminar	Advisor	Attachment	directed	Seminar 2,	Experience
	and Weekly	Meeting	(High	Learning or	School Visits,	Activities
	Lunch		School)	Homework	or Special	
	Meetings			Time!	Workshops	
Afternoon	School	Audit	School	Audit	Inquiry	Cultural
	Attachment	Course	Attachment	Course	Project	Experience
	(Elementary)		(High		Research	Activities
			School)		Time	
Evenings		Audit		Technology	Fulbright	
		Course		Workshop	Singapore	
					Dinner	

The Struggles

No story exists without a struggle, and over the course of the entire stint in the US, there were certainly many struggles evident within the education system. In the idyllic small town where I was based, demographic changes and economic pressures had led to multiple cost-cutting measures across the county, of which schools were not spared. One such proposed cost-saving measure during my stint was the reduction of foreign language learning classes for the schools despite its efficacy and popularity among the students. What transpired was a demonstration of democracy in action, as language learning experts from the community, led by my faculty advisor Dr Jason Killam, began using their research and expertise to debate the issue before the district school board. During this period, the focus of my meetings with my faculty advisor shifted from my inquiry project to the importance of multilingualism. I was able to provide insights, thanks to my academic training as a psycholinguist as well as my experience coming from a country like Singapore that promotes bilingualism. In short, the evidence from

experts and the community presented before the school board led to the preservation of foreign language programmes in schools there.

Shifting from the rural schools in idyllic Indiana county to the urban school in Pittsburgh for the second half of my teaching experience revealed the difficulties experienced by teachers in differing communities. While I had previously observed the teaching and learning environment in inner-city schools in New York City as a bystander, being actually involved in teaching in such an environment required a completely different mindset and skillset. Regardless of their language or social background, every student was expected to use the same learning materials and take the same tests, and while it is attainable for many students across the state or the nation, disadvantaged students often struggle to keep up with the curriculum. My partner teacher in the school, Miss Christine Tapu, who received the Fulbright Distinguished Awards in Teaching Programme for US Teachers 2019/20, set me to work on the very first day of the school experience. Working largely with refugee or minority students with language proficiency far below the curriculum guidelines was a constant struggle, and every trick in my teaching repertoire had to be unleashed in order to ensure that every student would be able to develop the language skills expected of their chronological age. Miss Tapu's pedagogy, classroom routines and expectations were outstanding, to say the least, and over the course of the next six weeks, we spent virtually every minute of the few free periods she had, discussing ideas and analysing the curriculum in order to benefit the learning of the students. Every single visitor to Miss Tapu's classroom, be they Fulbrighters or even IUP staff, was put to work with the learners in the classroom and directing the learning activities. While we were technically allowed to be passive observers in the classrooms, across the experiences of all the Fulbrighters, every single one was actively involved in the teaching of the students during the school experience. Notwithstanding the fact that these students were only temporary charges, the Fulbrighters had numerous discussions on how to improve the students' learning and the conditions for learning during our long bus rides to and from the school.

Browsing the Catalogues in the *Library of Paradoxes*

My inquiry project focused largely on the teaching and learning of Thinking Skills, be they Creative, Critical, Applied or Design, in schools in the United States and investigations into social and educational conditions in which such skills flourish. While there was much to learn in the town and hosting university where I was based, many answers to these questions in my inquiry project could only be found through travel across the country. Most of the travels were done on

weekends or during the one-week spring break. The closest city to the hosting university was Pittsburgh. It perfectly suited my inquiry project as Pittsburgh is a Rust-Belt city that once flourished under the steel and coal boom, subsequently facing a decline when these industries lost their global competitiveness. However, in the last decade, Pittsburgh, like a phoenix rising from its ashes, has been undergoing its renaissance with the shift towards new technologies led by two Pittsburgh-based universities: Carnegie Mellon University and University of Pittsburgh, both internationally renowned for their groundbreaking work in the field. Highly innovative companies like Duolingo and Argo AI are recruiting at a much higher rate than traditional employers like the steel mills and gas fields, and for a small city, it boasts some of the best museums and science centers in the country, and I dare say, the world. Unsurprisingly, the most visited museum in Pittsburgh is the Carnegie Science Centre since it showcases outstanding ideas in science and how these ideas materialise in reality through the partnership between the scientists who discover the ideas or facts and the thinkers who turn them into reality. It also celebrates the thought processes, creativity and application of ideas by great thinkers across human history, and on one of my visits, a special exhibit featuring Leonardo Da Vinci actually displayed life-size replicas of many of his inventions. In fact, many of the replicas were based on drawings by Da Vinci which likely would not have been produced during his lifetime, and the feats of engineering involved in turning Da Vinci's imagination into reality is an excellent demonstration of the thinking processes I was researching on for my inquiry project.



Life-size replicas of some of Da Vinci's inventions at the Carnegie Science Centre in Pittsburgh

However impressive the achievements of a few individuals or an organisation, the true measure of a society's achievement is how it transfers these knowledge, skills and mindsets to their future generation. Over the course of my research, I began exploring the 'shadow' education systems that exist within the United States. Unlike tuition agencies and enrichment centers in Singapore, museums, science centers, and community organisations predominate in the United States. Furthermore, unlike shadow education systems which merely replicate the mainstream education system, 'shadow' education systems in the US are used by experts and communities to supplement what is perceived as absent in the mainstream education system: in the field of arts, sciences, sports, and practically every field necessary to the growth of a well-rounded individual. Having visited more than a dozen museums, zoos and community organisations, both large and small, from big cities such as New York, Washington D.C., and Jersey City, to those in small towns such as Allentown and Lancaster, what was most striking was the large array of learning programmes for children and, occasionally, adults, at low or no cost, featuring some of the most interesting and groundbreaking work in the field. Another point of note was that such programmes were conducted by volunteer experts in the field, as evident by many STEM community learning programmes taught by professors and graduate researchers from its universities who commit to regular volunteer work at the museums and community organisations. Many of the volunteers I had the opportunity to speak to were deeply passionate about their field of service and put in far more than was expected of them when conducting such programmes.





Volunteers at the Museum of Modern Art in New York City (left) and the Da Vinci Science Centre in Allentown (right) conducting learning programmes in their field of expertise to young children from the community

Fun in the Sun

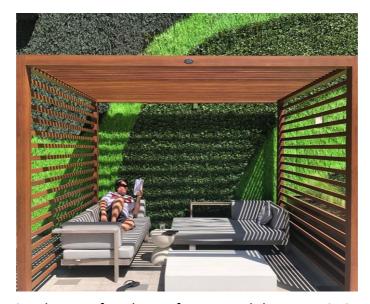
There is an unmistakable, almost indescribable, beauty in coldness. The temporality of stillness masquerading as death and nothingness, a barrenness soon to be crushed by life overwhelming. Most of the activities during my stint in the US were defined by the coldness of the weather, and while the other Singaporean Fulbrighters headed south for warmer climes during the Spring Break, my explorations of schools and museums kept me in the north. Nonetheless, the yearning for the warmth and sunshine of the tropics kept stirring, and I was fortunate enough to head for Austin, Texas for the Design Thinking Conference during the second half of the programme. Of the mindboggling array of conferences we could attend in the US, I deliberately chose a conference unrelated to education as I wanted to find out how industries and community organisations were putting thinking into practice. At the conference, I found out how Creative, Critical and Applied Thinking were merged within the field of Design Thinking to create solutions for consumers, organisations and the general public. During the conference, both the workshops, activities and intense conversations with participants from myriad fields and walks of life demonstrated that the purportedly barren Library of Paradoxes was in fact filled with overwhelming life. The central tenet behind Design Thinking is the application of thinking skills after empathising with the users of the products or services. Putting the users first leads to the most remarkable changes in the experiences of the users, and these users continue to reengage with the activities with great satisfaction and even joy. Imagine transposing our students as the 'users' of the services we provide as teachers, and imagine what Creative, Critical, Applied and Design Thinking can do when we truly understand them and their needs. Their actions will be no different from the consumers who constantly repurchase the products and services of companies that apply these principles. Highly influential speakers from diverse companies such as Pepsi, Samsung, Discovery and IDEAN provided inspirational insights on how blending those thinking processes with empathy led to significant changes in both the products as well as their own organisational processes. I also had the opportunity to visit IBM's Design Studio in Austin where we could literally observe innovative thinking at its finest at work in real-time.



Summative notes from some of the keynote speeches on Day 1 of the Design Thinking Conference in Austin, Texas



Entrance of the legendary IBM Austin Design Studio where some of the finest applied Design Thinkers worked their magic in finding technological solutions



The only day I had enjoying the sun after the conference and the transcription of my research notes!

Austin, Texas was not merely the site for the conference but also where I conducted a significant portion of the interviews for my research. Having gathered data from experts and laypersons from the northern, eastern and western parts of the United States, Austin's position along the south as well as its uniquely cosmopolitan makeup and progressive vision made it a perfect site for the collection of insights on modern education. None of the people I had met in Austin declined my request to be interviewed. The trip was remembered for rich conversations on the state of education in the United States, the importance of thinking skills, and the social change needed for future generations of Americans to truly live up to their fullest potential. One of the most interesting groups I met

was a group of homeless people who lived on the streets near the hotel I was staying in. Every night during my week in Austin, I had long conversations with different homeless people on the issues they faced, their education experience, and their hopes and dreams for a better future. Many had heartbreaking stories to tell, and one of the key revelations during those conversations was that their perspective on the utility and purpose of education was greatly undervalued and underrepresented, and while no education system ever intended their learners to end up in such states, what each system does, and perhaps what every school or teacher does, could drastically increase the probability or greatly decrease the likelihood of such circumstances ever happening.

The End?

Unlike the popular adage, all good things do not come to an end. In fact, these wondrous experiences, inspiring people and inimitable things we had, met or received, leave their permanent footprints in our hearts and minds, forever shaping our beliefs, thoughts, actions and speech. The entire Fulbright journey has been like nothing I have ever experienced before, allowing me to discover new insights about people, places, programmes, processes and even myself. Graduation Day was the final item in our long itinerary at IUP before we headed to Washington, D.C. for the end-of-programme meetups with the other Fulbrighters based in Arizona and Syracuse, as well as the officials from the US Department of State. We were rather surprised that we attended the graduation ceremony together with undergraduate and graduate students at the university. Following the graduation in IUP, after another two days of intensive end-of-programme sharing in Washington D.C., we had our farewell dinner before the final send-off where tears flowed freely amongst the participants, university staff and programme coordinators.



Singaporean and Indonesian Fulbrighters with Dr Michelle Petrucci during Graduation Day at IUP



IUP Fulbrighters final dinner in Washington D.C. before an all-night reminiscing session by the poolside

Epilogue

Learning from and inspiring one another during the Fulbright programme are to be expected, especially among a community of highly-influential and highly-committed individuals. My inquiry project, as well as the programmes and practices I had developed in Singapore, was of great interest to many other Fulbrighters, and over the course of the programme, many of them invited my team and me to conduct sharing sessions in their home country. One of the countries closest to my heart is Indonesia, and I accepted the invitation by one of the Indonesian Fulbrighters, Ni Putu Wiwik, to conduct a training session in her home district of Denpasar, Bali in June 2019, less than a month upon our return to our home countries. Teachers in Singapore are indeed among the best trained in the world, and the opportunities for professional development that we have are what many countries can only ever aspire to have. Let us treasure it.



Denpasar Teachers exploring the use of droids for developing creative thinking



Participants and presenters at the Teaching Thinking workshop in Denpasar, Bali