

STINT Teaching Sabbatical 2018
National Institute of Education (NIE) an institute of
Nanyang Technological University (NTU)
Singapore, Singapore

Final report



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In this final report on my STINT Teaching Sabbatical, I have summarized and reflected upon my daily work at the National Institute of Education (NIE), an institute of Nanyang Technological University (NTU), in the Learning Sciences and Technologies (LST) work group. I have also described the overall experience of participating in the STINT Teaching Sabbatical Program. This report is presented as follows: *Preparing and planning, Tasks and responsibilities, Activities during the semester, Comparing and Reflecting on the teaching experience, Lessons learned, Future work and Summary in reflection*. References and a number of photos are included (Appendix 1).

Preparation and planning

My planning visit took place in April of 2018. During this week, I had hoped to stay on campus at the Nanyang Executive Center (NEC), which is a campus-based conference center and hotel. However, as there were several ongoing conferences that week, the NEC was completely booked. Instead, I stayed at the Rochester Avenue Plaza, which was suggested by my contact person at NTU. Although not on campus, this worked out well as the hotel was close to the MRT and did not take very long to travel back and forth to the campus for scheduled meetings. I was also very fortunate to have my husband with me during the planning visit, which gave us the opportunity to share the experience, prepare for my stay and for him to see where I was going to live and work in Singapore. Having him with me on my planning visit was very important for me, as we saw this as a joint project.

During my planning visit, I met my contact person at NTU, Ms. Sophia Li Hui, Assistant Manager, Office of International Affairs. Ms. Hui had the main responsibility for the STINT-scholars at NTU. At first, it was somewhat confusing to have a contact person at NTU as well as contact persons at the NIE. There were many e-mails that went back and forth between my contact persons, and I found it difficult to understand who was e-mailing who and the order of things. Once in place at the NTU and the NIE, this was no longer a problem. The head of the LST group Associate Professor (A/P) Gwendoline Choon Lang Quek and the LST administrator Ms. Patricia Hui Hian Ann were my main contact persons. Another very important person whom I met later during my stay was Ms. Hui Mei Yee, at the NIE Human Resource Department, as she was in charge of all of my employment pass issues.

The planning visit involved meeting my contact person, Ms. Hui, and a tour of the NTU and the NIE campuses. I also had the opportunity to meet Professor Meng Hwa Er, Senior Advisor, President's Office, International Relations, NTU, who provided an introduction to the university. NTU is ranked 11th globally (QS World University Ranking 2018) as well as being the world's top young university, with 33,000 students and 4,300 faculty (NTU, 2019b). NIE hosts 12 academic groups, with some 3,851 students and 360 faculty members (NIE, 2019). Five bus routes circle the campus for transportation, with most students living in residential halls on campus, eating at food courts and having easy access to all services needed on campus.

Other appointments during my planning visit were with my contact persons at the NIE at LST. I had the opportunity to explain my ideas about what I wanted to see and do during my time at LST. A number of my new colleagues were also present during my visit at the department, giving me the chance to say hello and inform that I would be arriving in the fall. One very important appointment during this week was with Mr. Ong Chee Keong, Assistant Manager of Faculty Housing Department, who showed us several apartments. Prior to my planning visit, having accepted the possibility to go to

NTU, I was very concerned about the possibility of finding housing. However, thanks to the NTU and NIE, and my contact person at the Faculty Housing, this issue was quickly solved and was no longer a concern.

Tasks and responsibilities

My tasks and responsibilities at LST are best described as co-teaching. I have taken part in more than twenty lessons (3 hrs.) in several different courses. At times, I have been active, and at other times I have been an observer. All of the courses, apart from a session in a master capstone course, have involved use of technology in teaching. The teachers of these classes welcomed me into their classrooms. From LST, I was asked to present constructive critique for the teachers in the classes as well as the planning of the classes, which I did gladly. As the design of several of the lessons was the same, there were very interesting opportunities for me to observe different teachers with different teaching styles in the classrooms. The students whom I met were general education students, student teachers, in service teachers, middle managers, and master students.

The classes that I was involved in were the following:

MLS126 Flipped Classrooms for Middle Managers in Schools

Description: This online experience provided some of the resources from a six-week blended course for managing flipped classrooms. The online component focused on five basic areas of the flipped classroom. The face-to-face component reinforced what participants learn independently online and focused on managing groups, levels, and cohorts of classes on flipped journeys. The blended course had been designed on the basis that meaningful and timely questions drive learning. Therefore, the online component had been designed to provide more questions than answers about flipping. The online-only participant was expected to be highly independent and self-directed in his/her quest to learn more about flipped learning. This not only put principles of flipped learning into play, but also modeled a main way of designing experiences for flipped learning.

AED38C Designing ICT-Based Constructivist Activities, (student with minor in Education)

Description: This course provided an opportunity for participants to learn constructivist learning theory and examples of how ICT tools might be used to support constructivist learning. We also discussed how to assess constructivist learning. Opportunities were provided for participants to design ICT enhanced learning activities using constructivist approach.

QED 50G/52G [PGDE (Pri/Sec)] Technologies for Meaningful Learning

Description: This course prepared student teachers to engage learners in the use of technology for 21st century meaningful/quality learning. Student teachers used a framework for 21st century quality learning to examine critical issues related to the design of technology-enhanced lessons. Besides focusing on the characteristics of 21st century quality learning such as active learning and reflective learning, cyber wellness considerations to promote responsible use of technology were discussed. Student teachers were required to demonstrate their ability to integrate content, pedagogical, and technological knowledge in designing meaningful technology-enhanced teaching and learning activities.

MMM800 Critical Inquiry

Description: This capstone course required the participants to identify a problem, which formed the focus of inquiry, as well as to locate and read the most relevant literature and undertake some data analysis (as appropriate) to generate suggested potential solution(s) to address the problem. The solution(s) were supposed to show evidence that they could take the available information and restructure it in an appropriate way to deal with the problem.

All of the classes were led by school teachers who were doing an internship at the NIE, most of them for a period of three years. This meant that these teachers became university teachers for a limited period, and then returned to their positions in their schools. Based on my observations and reflections, there were many discussions regarding the design of education for teaching with technology and the actual impact on practice, as well as how to inspire teachers to implement technology in their teaching.

Teaching teachers to use technology in the classroom is a very complex task. It involves knowledge about teaching and tools as well as teaching with tools, in which there is often a lot of hesitation from student teachers. In this capacity, a teacher must meet the students on their level, engage and motivate them to test and try the technologies, always with pedagogy in focus. I was very fortunate to meet and follow four teachers of technology for education, all of whom were excellent. My observations were used for writing a recommendation letter for one of the teachers, to continue work at LST as a lecturer. Other tasks and responsibilities involved holding a formal sharing session with the LST department as well as participating in group meetings and seminars. Information and discussions regarding tasks and lesson preparation occurred daily. This was also a possibility to discuss differences between teaching and learning, but also working as a teacher in Singapore. At work, I always left my office door open, in case someone might come by and want to ask something. However, this was unusual. Most of the doors in the long corridors were closed.

Activities during the semester

Beyond teaching and participation in the work at the department, I also took the opportunity to attend a number of faculty development courses at the NTU Professional Development Center. The center provided a new set of courses every month, which faculty could apply to as needed. These courses involved specific areas of pedagogy or teaching design, for example, constructing multiple-choice questions, flipped classroom, recording video lectures, as well as assessment and examination practices. These courses were very important for my learning. As NTU and NIE are very advanced in their use of e-learning and flipped classroom, these courses provided me with insight into the specific subject areas in technology for teaching, but also gave insight into the strategies behind the implementation of the designs and tools used. One especially interesting insight was the administrative resources provided to support the faculty in recording lectures. Faculty members have access to a learning designer, technician, and recording studio for recording lectures. PowerPoint slides were also double-checked to ensure that references were correct and that there were no copyright issues, as well as an overall quality check. All lectures, which took place in lecture halls by lecturers or visiting scholars, were recorded and published on the home page. Another very valuable part of these courses was meeting other faculty members at different departments and institutions, who were also in the process of implementing technology in their teaching on different levels.

One important visit for me, together with the other STINT fellows was meeting with the head of the Faculty Development, Teaching, Learning & Pedagogy Division, Dr. Peter Looker. Dr. Looker gave a historical overview of the implementation and expansion of flipped learning at NTU. As this pedagogical approach becomes increasingly employed, the university is now looking at ways to convert large lecture halls, which are not used, into larger versions of flipped classroom working spaces. To this aim, an extensive amount of resources is available to support this work.

Other activities involved general meetings with all of the NIE and Town Hall Meetings at NTU. These meetings were held in large lecture halls or at the Nanyang Auditorium. Nanyang Auditorium is the largest university lecture hall in Singapore, seating 1,689 people (NTU, 2019a). These meetings provided important reports about the state of the university, for example, actual rankings, strategic efforts for development and investments. There were also opportunities for faculty and staff to ask questions directly to the president of NTU or NIE.

During my stay, I also attended a number of lectures by guest lecturers and visiting professors at both NIE and NTU. I attended the GSC Graduate Student Conference in order to listen to students talk about ongoing doctoral and master projects. I attended the Educational Research Association of Singapore (ERAS) and Asia-Pacific Educational Research Association (APERA) International Conference 2018 from November 12 - 14 with the theme “Joy of Learning in a Complex World.” I also presented a summary of my research at the Eurasia Research 5th ICRTTEL 2018 International Conference on Research in Teaching, Education & Learning on November 14 and 15.

Comparing and reflecting on the teaching experience

There are major differences between the education system in Singapore and Sweden, which is perhaps what made my teaching sabbatical so interesting and inspiring.

The educational programs at the NTU and NIE attract, what is said to be, the top 15% of students in Singapore and internationally. The universities are tuition-based, and there is no set limit for the number of students who are accepted. For excellent students, scholarships are available. The students are highly motivated and invest a great amount of time in their studies. As a country with a lack of natural resources, human capital is very important for Singapore in order to be competitive on the global market. In line with this thought, education is regarded highly as well as education institutions and the role of teachers. In my experience, the respect shown toward teachers in Singapore today is equivalent to the position of teachers in Sweden in the 1960s. In teacher education, this is interesting, because the students studying to be teachers are the top 15% and, naturally, become very good teachers. Further, the Ministry of Education (MOE) has set guidelines for curricula, which is very structured and controlled. The idea of recommendation-based curricula in schools was very difficult for my colleagues to understand – how do you know that teachers do what they are supposed to? The same was true regarding questions on the low number of students applying to teacher education and the upcoming need for so many teachers in Sweden. Moreover, these excellent students were also graded according to the curve, which meant that although many were extremely good academically, they still did not get the best grades. Another interesting insight was that while young children do very well in PISA-tests, there is also a very high level of cyber-bullying. It was my experience, listening to films by the MOE,

that there is a lot of work in progress, which involves a shift in the focus on testing toward what is called the joy of learning. Here, perhaps Sweden has something to learn.

With highly motivated students, my experience was that there was a lot of pressure on the teachers. Tenure positions were difficult to get, while at the same time publishing pressure and receiving good evaluations from students were of major importance. Compared to Sweden, this meant very long working hours and little job security. It was evident that both the students and faculty members were under a lot of stress. University rankings are very important in Asia as in other parts of the world, and these rankings were reported frequently during formal meetings such as Town Hall Meetings and The State of the University Address, as noted above.

In teaching with technology, it is important to have access to technology. Here, NIE and NTU were excellent. As noted above, a large amount of resources were put into technology for teaching at NTU and NIE. For example, at Mid Sweden University, we only have a few Active Learning Classrooms (ALC). At NTU, there were 290 such classrooms. Access to these rooms is very important in order to be able to teach in line with the flipped classroom approach, and to have a strong focus on student active and student centered learning. Having worked in NIEs I-space and visited the Tinkering room, I know that I have had the opportunity to teach in one of Asia's, and most likely the world's, best technology-supported learning classroom environments.

I experienced many things during my work at NIE in Singapore. One of the most important things that I came to appreciate was the low level of hierarchy that we have in academia in Sweden. Singapore was much stricter, and my contact person became very important in contacting people to organize visits to libraries, different departments at NTU and NIE and a visit to the National University of Singapore (NUS). It had not been possible to arrange these visits on my own. Another important lesson involved the importance of being actively responsible for the things that I wanted to learn more about, see or experience; here, my contact person was extremely valuable. Although the people at the LST were very warm and welcoming, there was not a lot of time for more informational conversations, instead appointments had to be made for meetings. I was very lucky to have had colleagues who, as they said, kidnapped me, and took me out for lunch and were very interested in sharing Singaporean food with me. Although initially very nervous about having a Swedish visiting scholar in their classrooms, which we laughed about later on, they welcomed me into their classrooms and in their work with their students.

Lessons learned

In my application for a STINT sabbatical, as in my pedagogical portfolio, I described my pedagogical view as based on dialogue, structure, and reflection. Knowledge is generated in many different ways, with learning as an interaction between the individual and the sociocultural environment (Säljö, 2000; Säljö, 2005; Vygotsky, 1978). One way to make learning fun is through dialogue, discussion, and collaboration as knowledge is created together by students and teachers. Dysthe and Igland (2003) believe that learning is closely linked to relationships. Learning takes place through participation and interaction where language and communication are the foundation (Dysthe & Igland, 2003; Dysthe & Nilsson, 1996). Thus, looking at the relationship between students and the teacher in the classroom as a collaborative environment, learning becomes experience-based (Furmark, 1999). This allowed me to see the importance of designs for teaching and learning which support active learning for students (Elmgren &

Henriksson, 2010). In line with these thoughts, my ideas revolve around the importance of constant and continuous reflection on my teaching as a reflective practitioner (Schön, 1987; Bie, 2014). This also involves taking on a critical stance in my role as a teacher, in line with the Scholarship of Teaching and Learning (SoTL), according to Boyer (1991).

Having these pedagogical ideas on dialogue, structure, active learning, and collaboration, I was introduced to the framework for Quality 21st century learning or 21QL (Chee & Chai, 2018). This framework comprises: *Authentic learning*, *Active learning*, *Reflective learning*, and *Collaborative learning* as a supporting framework for designing quality 21st century learning. This framework allowed me to both confirm my previous pedagogical view and widen my perspective in regard to teaching, learning, and leading with technology as well as how to implement these ideas in the classroom through authentic tasks in practice. This work in the classroom with the framework has made it possible for me to create a distance to my teaching, to evaluate my teaching by observing others and having time for reflection. We often ask our students to reflect upon different issues in the classroom. However, the question arises: do they know what we mean by reflection and how to go about this? Do we give them time to reflect? These questions were discussed frequently with my colleagues.

Future work

My stay in Singapore has worked well in terms of practicalities, and it is difficult for me to see if anything could have been better. The most important lesson for me has been the experience of the necessity of taking the step outside of my own teaching practice and being immersed in another system of teaching and pedagogy in order to become aware of my own teaching and teaching environment. Another question, which I have thought about a lot during my teaching sabbatical, is the possibility for a teacher to reflect upon teaching in the midst of teaching. In reflection, I see this as difficult. It is first when immersed in another environment that it is possible to observe one's own environment and practice as mirrored in this new environment. Therefore, I hope to speak about this experience to as many of my colleagues as possible, and through this encourage them to take part in a STINT-sabbatical or other forms of exchanges. I have held an informational meeting at my institution, and a second meeting is planned. I hope that these meetings will inspire others to take part. I will also include experiences from my teaching sabbatical in my conference presentations. Another part of my future work is continued work in setting up an exchange program for teachers and students with NIE and NTU. I hope to return to Singapore next year to participate in a conference and to visit schools. All of these things together will hopefully help to develop teaching and learning practices at my institution and at my university. In my own work, I will strive to implement the 21QL framework, in order to increase my own reflective capacity, and in turn my students' reflective capacity, on the meaningful use of technology for innovative teaching, learning, and assessment of content and skills.

Summary in reflection

In summary, my stay in Singapore and my STINT sabbatical have had more impact on me than I could ever have imagined. I have grown professionally and as an individual. I have enjoyed every minute of my stay, and have truly embraced the simple things of daily life: walking slowly to work amidst lush greenery in humid, tropical heat to a cold air-conditioned office where I took my sweater off before going back outside. Saying "good morning" to the man who swept the street outside of the faculty housing and smiling when he said "good morning, ma'am" back. I have enjoyed all of the different kinds of food, which my colleagues have introduced me to, experiencing wonderful new

food sensations and tastes amid loud and lively food courts, together with a diverse group of people. I have made new friends when practicing golf at the Bukit Batok golf range. I have been a tourist in Singapore with my husband during his visits, and I have explored the culture behind the tourist attractions when alone. Often, I found myself standing still, looking up at buildings in fascination, amazed by the architecture and the integration of plants and trees. I have enjoyed weekly dinners with two other STINT-scholars and families, who have shared their experiences of teaching and learning at NTU and of things to see and do in Singapore. I have travelled to the beautiful island of Tioman in Malaysia, met other STINT-scholars in Hong Kong at a Mid-term meeting, and experienced the Peranakan culture in Chinatown in downtown Singapore. I have worked as much as possible, studied a new framework for teaching learning with technology in depth, reflected upon my own teaching practice and have returned, inspired and looking forward to continuing this work within my institution and at my university.

Once again, I wish to express my warmest gratitude to STINT for granting me the stipend, to NIE and NTU for choosing me and offering me the possibility to come and work, and to MIUN for allowing me to go.

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Appendix 1. A few pictures



Working in I-space



View from the flat at faculty housing



NIE banners: Professionalism, Partners in learning, Students our focus...



Enjoying pandam cake at LST



The School of Art, Design and Media



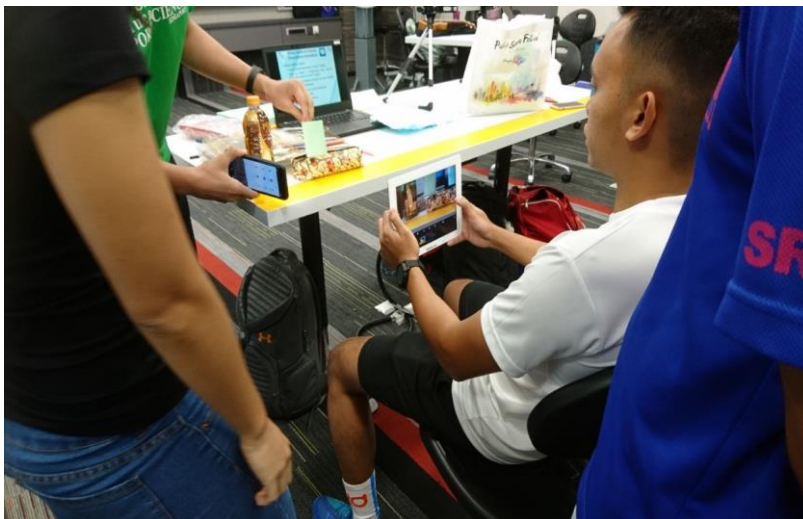
NTU President Subra Sabresh speaking on investments in people



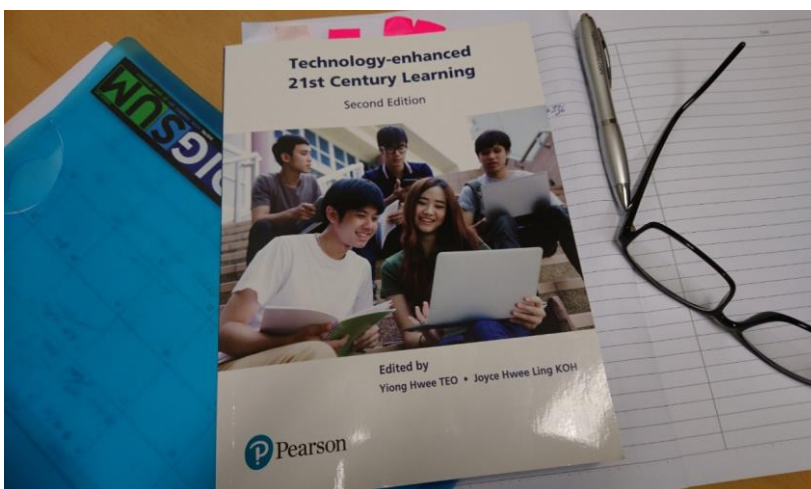
The Oasia hotel



Working in I-space with students. Green screen station



Story line station



The textbook



Lower level of the Bukit Batok Golf Range



Gardens by the Bay. The Flower Dome with Japanese cherry trees in bloom