Final report from a semester at Nanyang Technological University, National Institute of Education, Department of Physical Education and Sport Science, in Singapore as a STINT-fellow within the Excellence-in-Teaching program 2015.

By Erik Backman, Senior Lecturer at The Swedish School of Sport and Health Sciences (GIH), Stockholm, Sweden, 2016-01-18.

## <u>Introduction</u>

When I was made aware of the opportunity to apply for a scholarship as a STINT-fellow within the Excellence-in-Teaching program, I tried to investigate which of the universities within the program who offered teacher education within the school subject of Physical Education (PETE), a context in which I have been working for the last 20 years. I discovered that Nanyang Technological University (NTU) in Singapore and Ohio State University were the two universities who had more developed PETE programs. I announced my interest to be spend a semester at one of these two universities and was later offered a position at NTU in Singapore.

# Preparation and planning

In February 2015, the coordinator at International Affairs NTU, Mrs Fern Yeo, made contact with me. Later I also got in touch with a contact at the department of Physical Education and Sport Science (PESS), but the main communication before the preparation visit to NTU (which was planned to early April 2015) was with Fern at International Affairs. It wasn't until close to the preparation visit that I got information from PESS that they wanted me to be responsible for and teach three different courses within their PETE program. I tried to express that I didn't wanted to be responsible for the courses on my own but instead to have a co-teaching partner with knowledge of the local context so that I would have more possibilities to develop myself as an educationalist (which I was also told would be one of the intentions with the program). I was also told from the contact at PESS that I would get a co-teaching partner but it later turned out that was not the case. Anyway, at that stage (it was just before the preparation visit) I found myself in a position where I couldn't do anything else but to accept the offer given from PESS. Perhaps, an intensified contact on an earlier stage between the STINT fellow (me) and the hosting institution (PESS) could have helped clear some of the misunderstandings which now occurred regarding my tasks and responsibilities during the visit at NTU. All in all, it felt good to know a little bit more about the courses I was assigned to teach in before the preparation visit.

As neither me nor my wife had been to Singapore before we were very excited for the preparation visit in April 2015. Our main impressions from the short visit were that the climate in Singapore was very hot and humid, and that it was a clean and well organized city/country and with friendly people. Very much in the city seemed to be about shopping and eating. We spent most of the short preparation visit in the city and there was just time to see some of the touristic attractions in the city. The actual visit to NTU was made during

one day, Friday 10 April. Mrs Fern Yeo met us (me and my wife Anna) at the administration and it turned out she had arranged a full day for us with many meetings. First, we got to meet the President of International Affairs, Professor Meng-Hwa who gave us a brief and very useful introduction to NTU. After that Fern followed us to meet the Head of PESS, Professor Balasekaran who told us a little bit about PESS. After that I got to meet Dr Kong (Veni) who, in turn, introduced me to several persons from the staff who informed me more about the courses I was planned to teach in. We also got a round-tour at the facilities at PESS which was really useful. All in all, the visit at PESS gave a short but very useful introduction of my tasks at the institution. After lunch, Fern picked us up and showed us the apartments at campus which we were to rent. Fern had arranged the meetings very well for us and we were warmly welcomed. At the actual preparation visit to PESS, some of the staff there also seemed to be prepared for our visit.

# Tasks and responsibilities

During the preparation trip in April, I learned that the three courses I was planned to be responsible for, and to teach and assess in, were:

- 1. Principles of games an introductory course in games pedagogy (both practical and theoretical) for beginning students at the PETE program.
- 2. Teaching effectiveness in PE a course for PETE students (theoretical) in their final year about effective teaching in Physical Education.
- 3. Current issues and trends in PE and sport a course for Master students (theoretical) about contemporary perspectives on Physical Education and sport.

All the three courses spanned over 13 weeks with one 3-hour class per week in each course. During the following months (particularly May and June) I was assigned the task to design unit outlines for each course, building on the learning outcomes and content that was already stated in the curriculum document for each course. This meant choosing literature and designing examination tasks that was constructively aligned with the learning outcomes and content for each course. Although I had very valuable contact with two PESS lecturers, Dr Mike McNeill and Mr Azhar Mohammed, I must emphasise that these tasks were quite a substantial responsibility for a visiting scholar who had no prior insight in the local university context. For the literature, my choice was to focus only on academic papers instead of books. Part of the reason for this, was for me as a visiting scholar to get a hold of the literature and to prepare myself, and another part of the reason was to make sure that the students could get a hold of all the literature online. The fact that I was responsible for all the courses on my own meant a lot of preparation reading the literature which was valuable but time-consuming. Although I had a lot of support from my mentor, Mr Azhar Mohammed, during the semester, being singularly responsible for all three courses (planning, teaching, assessment) meant a lot of work on my own and not as much collaboration and exchange as I think a first experience as a visiting scholar from another country should contain. I can honestly say that the educational perspective and approach that I had before arriving in

Singapore has not been challenged much from local lecturers during my visit as I have not had time to meet them very much.

#### Activities during the semester

As mentioned above I spent a lot of my time at PESS planning, conducting and assessing courses. The number of students in each course was limited to 14-18 students which made it easier to learn everybody by name. In order to prepare for each class the students I had a particular PE- or sport-related topic with 3-4 papers to read. When meeting for the class, the students had been assigned to solve tasks in groups through discussions and to present their solutions to the rest of the class. Sometimes I held shorter presentations during the classes. The amount of time demanded for planning, conducting and assessing my own courses unfortunately led to that I didn't have time to visit other lecturers' teaching or engage myself with PESS-lecturers in projects outside my own teaching during my time in Singapore. Besides my teaching tasks I also held a seminar for the PESS staff under the topic "Challenges for Physical Education Teacher Education in Sweden and Scandinavia". Based on my experiences from 9 months research sabbatical in the Australian PETE context (Sydney), and my time at PESS in Singapore, the seminar ended in an interesting discussion regarding how PETE in constructed in different countries.

### Important lessons

It was a valuable exercise to try to discern the knowledge that came out of my experiences in Singapore. At a first glance all experiences seems to be blended together but after a while, and with some distance to it, I can now point at a few factors.

Firstly, the value of international exchange, both for individual lecturers and for institutions, cannot be underestimated. In order to question the knowledge that we sometimes take for granted, we have to be exposed to new perspectives, new cultures and new contexts. During my time at PESS I tried to deepen myself into new models of knowledge without valuing them as more or less accurate in relation to how I and my colleagues see and do things at GIH in Stockholm. In particular this was the case with the construction of the Content Knowledge (CK) taught at PESS.

Secondly, although the construction of PETE, and CK within PETE, is very much culturally dependent, there are also similarities between different countries. I had no prior knowledge about the PE and PETE contexts in Singapore, still I felt I have been able to translate local issues into a global context, for example in the discussion of PE and PETE curricula. This impression was also strengthened by the evaluations from students in my courses.

Finally, an important outcome of the Singaporean visit for me is the development of my language skills, both speaking and in writing. I have learned a lot when there was no option but to try and make myself understood. Sometimes the students had to ask me questions

and sometimes I had to ask them, but somehow we always ended up in a mutual understanding.

# Comparison between the foreign and the home institution (in Sweden)

In the following I will discuss differences, similarities and possibilities for change in Sweden and Singapore with regards to some specific aspects.

## Student population

The number of students at PESS (Singapore) and at GIH (Stockholm) was actually quite similar. At PESS there were a total of 750 students divided on the different programs. At GIH there are a total of about 1 000 students. At both departments, a majority of the students were studying at PETE programs. One important difference was that while PESS is a department located within NIE (with a total of 15 000 students), and thereby connected to NTU, GIH in Sweden is its own independent university. Another important difference is that while PESS is the only department educating PE teachers in Singapore (approx. 5,5 million population), GIH is one of 8 universities with PETE in Sweden (approx 9,6 million population).

#### The relation between research and education

Both in Singapore and in Sweden the PE context have been widely and deeply researched. My impression was that there was a strong relation between research and education within the PETE programs at both universities. Several staff at PESS (Singapore) and GIH (Stockholm) were authors of papers and books and their work were used in PETE courses given at the universities. Several researchers at both universities were also co-authors together with researchers from other countries. Besides the work written by PESS staff, a general impression of the literature in the PETE courses was that that it was heavy influenced by research from US and UK. Other PE-contexts that are regarded as internationally prominent, and perhaps a bit more socially critical compared to its counterparts in the UK and especially in the US, are Australia and New Zealand. Interestingly, very little work from PE scholars in Australia and New Zealand were to be found among the literature at courses given within PESS in Singapore. Sociological perspectives such as gender, ethnicity and social class were widely acknowledged within the Swedish PETE context, however not as common at PESS in Singapore.

## - The relation between teacher and student

Interestingly, when visiting PESS in April to plan my stay there I was introduced to PESS by a lecturer who told me that I shouldn't expect the students to ask me as much questions as I was probably used to from my university in Sweden. I guess this comment strengthened my impression of many Asian students to be very humble, respectful and perhaps sometimes afraid to address their teachers. I also met several students with that attitude but it was far from a general description of Singaporean students. In fact, my impression was that

Singaporean students at PESS were very much like the students in at GIH in Sweden regarding communication with their teachers and concentration on the classes. Perhaps a bit more polite, knowledgeable and skillful compared to the Swedish students but otherwise no major differences.

- The institution's view of breadth versus specialization in education

Both at PESS (Singapore) and at GIH (Stockholm) my impression was that specialized knowledge was highly valued. Teaching staff at both institutions often had specialized knowledge within a narrow field, for example nutrition, endurance training or teaching strategies in ballgames. However, it also seemed that teaching staff at both institutions had to teach more general courses in PE or in general pedagogy. This was perhaps more the case at GIH as they managed all courses within the PETE program (content knowledge, general pedagogy and teaching practice) while PESS did not manage courses in general pedagogy (these courses were held in other departments at NIE). Most staff within the PETE program at GIH had to teach both PE (content knowledge) and courses in general pedagogy. With regards to the structure of the PETE program at PESS and GIH my impression was that the level of specialization increased as the students got further in their education. For example, during my visit at PESS I got to teach the course "Principles of games" to first-year-students while the students met more specialized ballgames later on their education.

- Competence development for teachers

Unfortunately, I did not get a detailed view about the options for competence development for teaching staff at PESS (Singapore). From conversations with my mentor at PESS, Mr Azhar Mohammed, I found that they had some kind of resources for competence development but I have no detailed knowledge about these conditions. At my home institution (GIH Stockholm) resources for competence development are rather limited and demands of presentations always follows with approved courses and conferences. On one hand, you could say that competence development is always embedded as you take on new courses and in that you have to read new literature. On the other hand, competence development in the meaning that you are not restricted to obligations and get to choose what type of course to take yourself is very rare.

 Teacher recruitment and the status of pedagogical merits compared to research merits

Both at PESS (Singapore) and at GIH (Stockholm), there was a rough division of teaching staff in those with PhD exam on one hand (senior lecturers, associate professors and professors) and those without PhD exam on the other (adjuncts). At both institutions it seemed that within the PhD-group most lecturers had permanent positions, but within the non-PhD-group many were hired on short contracts. This condition displays the clear tendency to value research merits higher than pedagogical merits in the university context and it calls for a need to develop more options to achieve academic acknowledgements based on teaching

experience and skills. A tendency that was more obvious at GIH compared to PESS was that the staff within the PhD-group was more occupied with teaching of theoretical components while as staff within the non-PhD-group taught more of practical sports. Perhaps this was also due to the fact that the rate of PhD-exams within the staff as a total appeared to be higher at PESS compared to GIH.

## Pedagogy and its importance

In some way, pedagogy has always had a central position within teacher education. This is also the case within PETE although it took different expressions at PESS (Singapore) compared to GIH (Stockholm). Pedagogical components were embedded in the teaching practice and sometimes comparisons and connections to the school context were emphasized. One thing that I missed from GIH during my visit at PESS was a context for researchers in Physical Education and Sport Pedagogy (PESP) to read and discuss each others' work. Partly, I think this was due to the fact that there were not as many PESPresearchers at PESS. Partly, I also think it was due to the fact that structured meetings for reading and critiquing each others' work (not to be mixed with review processes at journals) is not a widespread phenomena within university. Another difference that I discovered was with regards to the type of pedagogy that was valued at the institutions. At PESS there was a lot of emphasis on teaching effectiveness, sometimes interpreted as trying to maintain high levels of physical activity within a PE class. There was also emphasis on students to acquire the knowledge, rules, norms and values of how games and sports are performed outside the school context, i.e. how elite sports are performed. At GIH, the focus was not so much on developing skills to keep children physically active but more on what is to be learned during PE (which could also mean cognitive abilities). Further, at GIH the students were learned to modify physical practices in order for them to be more inclusive. This sometimes meant to deliberately avoid performing the sport the way that it "should be performed".

#### - Curriculum and courses offered

As mentioned, there are three different types of courses offered within PETE: content knowledge courses, general pedagogy courses and teaching practice courses. This was the case with PETE both in Singapore and in Sweden. My impression was that the extent and emphasis on content knowledge courses was more significant at PESS compared to GIH. Perhaps this was a reflection of that the newly reformed (2014) PE school curriculum in Singapore was also more detailed with regards to content knowledge compared to the Swedish one (reformed in 2011). Besides the PETE program, both institutions have other programs: Sport Science Management (SSM) at PESS and Health Pedagogy (HP) and Sport Coaching (SM) at GIH.

#### Forms of examination

The forms of examination were not very different at PESS (Singapore) from GIH (Stockholm) although, again, there was a slight difference in emphasis. At GIH, examinations of practical

components where students are being assessed on their ability to perform sport movements were not very common, although this type examination occurs occasionally. My impression was that this type of examination was quite common in the content knowledge courses at PESS. There has been a critique towards that these types of examinations are in fact an assessment of body types and also that these forms of examinations are sometimes decontextualised from pedagogical situations. On the other hand, there has also been critique in PETE against the marginalization of students' movement ability for the benefit of more cognitive abilities. The fact that assessment of students' movement ability was not a sensitive issue at PESS was also strengthened by the fact that movement tests (proficiency tests) of students were arranged as an entry requirement before students were to start the PETE program. Apart from the examination of students' movement ability, my impression was that there was a bit more written tests at PESS compared to GIH where instead a written paper is a common form of examination. Students at PESS seemed to be used to being ranked and graded which they also claimed characterised the whole educational system in Singapore.

- To what extent educational programs conform to labour market needs

This is a very interesting topic in which I found the conditions in Singapore and Sweden to be totally different. In Sweden, university education is a market that is not controlled in relation to what is needed on the labour market, at least this is the case for teacher education. For PETE this has meant that today 9 Swedish universities are offering education to become a PE teacher. Prior to the situation today, Sweden has had a history of even more PETE universities which created a significant overproduction of examined PE teachers for a number of years. In Singapore, with approx. 5,5 million population, there is one university educating PE teachers. All the students that enter the PETE program at PESS are also guaranteed a position as a PE teacher in a school when they take their exam. Thus, there seems to be a much more rigorous governmental control of university education with regards to supply and demands in Singapore compared to Sweden. Although I am a bit skeptical to the governmental control in Singapore in general, I believe that the educational system in Sweden, were there seems to be a non-existent governmental control of higher education in relation to the needs on the labour market, has a lot to learn and gain economically from a greater control in relation to how many PE teachers that are needed in Swedish schools. Another benefit of decreasing the number of PETE universities in Sweden would be that it would concentrate the competence among staff to fewer universities and create a situation of concurrence among students, and higher status, with regards to the available positions.

#### Use of technology

With regards to the use of technology I found no major differences among PESS (Singapore) and GIH (Stockholm). Both institutions are highly "computorised" and software to facilitate teaching and learning are common. In PETE, cameras are often used today to make it easier

for observers (teacher or students) to "go back" and watch movements, teaching or social interaction several times. As with GIH (and most universities worldwide), PESS also used a web-learning-portal in which the courses were administrated. In the courses I taught, we did not use technology in any specific way.

#### - Distance education

Unfortunately, I have no information about distance education at PESS (Singapore). Generally, at universities offering PETE or other sport related courses and programs, this is an underdeveloped area of knowledge. Surely, this can be explained by the physical nature of many sport courses, in which experiences of movement and physical interaction are important components. At GIH (Stockholm), we do not offer any distance education today. Interestingly, after arriving in Sweden, I have started to work part-time at Dalarna University, which is a university specialized on distance education. However, when they are now starting up a PETE program at Dalarna University, the Head has made an exception for PETE to have more of traditional teaching.

#### Relation between the institution and its environment

The fact that PESS (Singapore) is a department within NIE which is in turn an institution within a large technological university is naturally a condition that has its effects on how PETE is constructed. From having formerly been an independent college for PE teacher education, PESS was founded in 1991 when it was also connected through NIE to NTU. GIH (Stockholm) is a specialized sport university with a 200-year old history. GIH is one of the oldest PETE universities in the world and naturally a lot of knowledge has been produced from GIH during the years. However, as in the case of GIH, strongly rooted traditions can also create boundaries for what can be said and done. For example, The Swedish Linggymnastics, created by Carl-Henrik Ling and developed to a world famous system for bodily exercise, had its origin at GIH and it wasn't until the later part of the twentieth century that sport and new types of physical practices began to loosen up the idea of physical exercise and PE in Sweden. The fact that GIH has had a close collaboration with Karolinska Institutet during the years has also strengthened the connection between physical exercise and medicine. The strong emphasis on science at NTU has most likely been influential for the establishment of the several laboratories at PESS (in for example anatomy, biomechanics, exercise physiology, biochemistry, etc.).

#### Action plan - topics to address and if possible introduce in Sweden

#### Personally

On a personal and professional level the visit at PESS in Singapore has given me lots of ideas about topics to write about. One topic I would like to address is about cultural differences with regards to how PETE is constructed in different countries. After visiting PETE universities in both Australia and Singapore it would be interesting to make some kind of

comparative analysis regarding what types of knowledge that is valued. Another topic that interests me is how the PE curriculum is constructed in different countries. I have seen clear differences with regards to the level of specification of how content should be taught and assessed in Singapore and Sweden. In Singapore the PE curriculum is a document of 80 pages while in Sweden it is 7 pages. There are both pros and cons with giving teachers detailed instructions of what and how they should teach and assess. The pros lie in that the teaching and assessment will hopefully be more equal. The cons lie within that when you give a PE teacher a manual of what and how to do, at the same time you take away a part of the teacher's space for interpretation, which could in turn be considered a part of a teacher's professional knowledge base.

# For the department

During my time in Singapore I have been inspired by a particular way of involving students in the assessment process of games and team sports. With help from two acknowledged and developed assessment instruments (1. Team Sport Assessment Procedure and 2. Games Performance Assessment Instrument), in which students learn to observe each other and make assessments of how their peers take part in game sports, PETE students will not only learn to assess content knowledge in game sports. Teachers will also get help to make more effective assessments compared to if they were doing this by themselves. My plan is now to implement these one of these assessment instruments, or a modified version of them, in the PETE program at my home institution GIH. Together with my Swedish colleagues we will plan the implementation process during the spring of 2016 and the actual implementation will start at the autumn semester 2016. This process will be followed up by an evaluation phase in the spring of 2017 which can hopefully result in publications.

#### For the institution

One topic that needs to be addressed at GIH is the internationalization. Not only do we have a weak internationalization with regards to staff coming and going, what is in need of particular development is the internationalization among students. I know we cannot compare GIH with a large university like NTU, from which thousands of students come to and go from each year. However, as for now, there are no GIH-students at all studying at universities abroad. I believe that this is partly due to the lack scholarships to apply for at GIH to study abroad. At a greater university there are more resources in terms of scholarships but also around the administration of internationalization. A small university like GIH cannot afford that. Walking around NTU campus in the evening and meeting students from all over the world was a wonderful experience which I will probably not meet at any Swedish university. However, I hope we can find ways to send one or two students from GIH to do semesters in other countries within a near future.

# <u>Gratitude</u>

Finally, I would like to express my deepest gratitude to STINT, to GIH and to PESS for making my visit to Singapore possible.