







A Day of Discovery

The Future of Medical Education





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MHGEducation

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Ready-to-Move

'Flying shoes', 'floating tissues', and running around with paper copier boxes were some of the games which some 50 staff from the National Healthcare Group (NHG) Education and College offices played at the inaugural 'Ready-to-Move Office Olympics', held on 22 December 2017.

Competing in teams, the staff played 'Minute to Win it'-styled games conducted in the format of an Olympic relay to vie for the top three positions.

RTM is a year-long staff engagement initiative started by the Education Office to help integrate, engage and mobilise the 90 strong staff from both the Education and College offices.

Ms Michelle Teo, Assistant Director, NHG Education, said that the initiative started out from a casual conversation on how both offices can bond through workplace 'playtime'.

"The intention is to get away from our workstations, do something fun outside our normal work environment," she added. "And teams were intentionally formed across different work units to encourage everyone to get to know other colleagues better, and hopefully build happy working relationships."

Cognisant of the offices' locale, budget constraints and scheduling concerns, the organising team – consisting of Ms Ong Sik Yin, Dr Winnie Teo and Mr Eugene Seng – concluded that the team-bonding



Tissue paper relay!

activities had to be conducted in-house.

"Arranging for external team bonding activities is not only costly, restrictive [time consuming], and may even be ineffective," said Dr Teo, Manager, NHG Education Development Office. She explained that as bonds takes time to build, most externally-ran programmes or workshops lack the required continuity or 'follow-ups'.

Dr Teo elaborated that in-house activities offers more control over content and frequency, which addresses the gap of continuity. "In this manner, structured opportunities can be created for social engagement, especially between colleagues who do not get the chance to interact in their daily work lives, especially for those who are located at Nexus@onenorth (where NHG HO is based)," she added.

"There must be the element of fun in the

challenges," said Mr Seng, Senior Executive (Communications), NHG Education, as he cautioned against conducting formal workshop-styled or task-based team bonding activities, which he believe would detract the participants from forming organic bonds. "The participants may be too engrossed or fixated with performing particular task(s) that they miss the real intention of the activity."

"That is why there has to be some level of ridiculousness in the way the games are played," stressed Mr Seng, before explaining why 'Minute to Win it'-styled games were adopted in the team challenges. "You need games that create a psychologically safe environment where everyone can let their hair down, laugh at themselves and most importantly have a good time!"

The response has been positive with many staff members praising the initiative.

Ms Reina Lee, Senior Executive, NHG Preprofessional Education Office, said that the activities allowed her to interact with colleagues outside of her usual group, breaking down boundaries.

"Yes! The activities do help us know our colleagues better," concurred Ms Melody Kuan, Programme Coordinator, NHG Residency. She noted that despite most of her teammates still feeling shy towards each other – after six months of team challenges, they will step up to participate in the games.

"It [RTM games] brings out the competitive spirit in us. Though we aim to win all the challenges, it's the journey to complete the games that brings out a lot of laughter amongst the team," chuckled Ms Kuan.

"I found the activities innovative, as I have not heard of any other organisation among my friends having this practice," said Ms See Wen Yu, Assistant Programme Coordinator, NHG Residency.

"I must say that the seemingly silly games helped us relax and laugh at ourselves – something that we ought to do more at Group Education!" shared Ms Serene Goh, Deputy Director, NHG Education. "I also want to applaud the [RTM] team for initiating 'Ready-to-move', and putting in much time and effort to 'move' us towards a more joyful and healthier workplace."

"I'm really proud that 'Ready-to-Move' finally got moving! It is one of the most enjoyed activities of NHG Education and College," said Ms Yvonne Ng, Senior Director (Education) and Executive Director, NHG College.

"Ready-to-Move' is an effort where we (NHG Education and College) want to encourage team bonding – 'work together, play together' and through past activities, it has truly shown that we work hard and we play hard too!" she said.

The first run of 'Ready-to-Move' will conclude in June 2018.



Scores depend on where the shoe lands

The Future of Medical Education

By Dr Vaikunthan Rajaratnam



Dr Vaikunthan Rajaratnam

Ubiquitous availability of broadband and smart devices together with the advances in technology have revolutionised higher education. They have been instrumental in the development and growth of accessing data on mobile devices universally – the basis of mobile learning. Medical and health professional education has not been spared by these changes.

Medical teachers and educators need to be cognisant of the fact that these changes in the landscape are here to stay and are no longer a passing fad. The medical teacher/educator therefore needs to be prepared to embrace and utilise these changes to enhance and improve the quality of their teaching skills.

Though not a panacea for all the challenges of modern-day medical education, this disruptive platform of learning with mobile devices needs to be understood by all teachers; to improve the quality of their teaching practice. The sooner the teachers come to terms with this tsunami in education, the quicker they can familiarise, assimilate and use these

educational technologies in their practice.

The classical hour-long lectures in the classroom are no longer compatible with the digital natives' learning styles. The teacher needs to be aware of alternative pedagogical strategies to engage the learner, and better utilise the scarce resource of time for both teacher and learner to maximise the learning encounter.

The flipped classroom has been proven to be an effective means of delivering teaching founded on the principles of asynchronous, on demand and self-paced learning. Beyond this, the mobile platform allows for learners from anywhere to participate synchronously in live learning activities – truly creating an egalitarian framework for modern medical education.

For this flipped classroom strategy to be effective, there is a need for digital educational resources (DER) to be created or curated. These are learning objects that include text, video, audio and interaction components that can be deployed on a universally accessible electronic platform – such as mobile devices – for consumption via streaming.

Therefore the teacher needs to acquire the competencies to create, deploy and distribute these DER for his/her current, future and potential global learners. In keeping with the constructivist view of peer-to-peer learning, the learners too, need to be competent in the co-creation of learning artefacts for peer consumption, and as a show case for teacher assessment for and of learning.

The ability of the modern smart device to capture, analyse and synthesise data provides the medical teacher with great opportunities to assess experiential and work-based learning, that is seamless, authentic and contextual. It is therefore mandatory, for any serious medical teacher today to be competent in basic educational technological skills, and incorporate that with his/her knowledge base on the subject matter (content) and pedagogical competencies as a teacher to be an effective medical educator.

Some links that will help you on your journey as a digital warrior in medical education: -

- Turning PowerPoint slides to video is an excellent DER. You can view this link to see how to create them (https://youtu.be/3a5cVEteyB8).
- How to use Evernote as an electronic portfolio. (https://youtu.be/pN_o91QVTe8).

Dr Vaikunthan Rajaratnam is a Senior Consultant Hand Surgeon at the Khoo Teck Puat Hospital. As a medical educator and instructional designer who is actively involved in undergraduate and postgraduate medical education, he saw the endless asynchronous teaching possibilities that mobile devices offered; which fuelled his pursuit to create mobile learning resources using open educational tools. Dr Vaikunthan also conducts regular faculty development workshops in mobile learning for health care professionals.

Finding Authenticity in Simulation

The shift in societal demands and the rapid progression of technology have changed the way health professions education (HPE) is imparted to current and future healthcare professionals.

Traditional teaching and assessment methods in healthcare (and general education) are constantly being substituted with newer, better, faster and (sometimes) cheaper equipment, to reduce the time involved in conducting "face-to-face" training.

Simulation training is one such educational tool that has become a mainstay in HPE due to the safe and controlled environment it provides, and most importantly its 'realistic' hands-on capabilities.

"Hi-tech is not always hi-fi," cautioned Associate Professor Wong Teck Yee, Cluster Education Director, National Healthcare Group (NHG), and his team during their pre-conference workshop at the recent Asia Pacific Medical Education Conference (10 January 2018). He elaborated that the use of hi-tech (latest or state-of-the-art) equipment does not always equate to "high-fidelity" (quality) teaching or learning occurring.

Fellow facilitator Dr Winnie Teo, Manager, NHG Education, said: "In the midst of relying on hi-tech equipment, educators may lose sight of the essence of the purpose of the simulation." Quoting Professor David Gaba, Dr Teo explained that simulation should "evoke or replicate substantial aspects of the real world in a fully interactive manner."

A/Prof Wong concurred, adding that, "If the trainee perceives the training [in a simulation] to be



Ms Tan Keng Teng

not believable, not going to help me [as a trainee], he or she would just go through the motions."

"Authenticity," said facilitator Ms Tan Keng Teng, Programme Director, National Pharmacy Residency Programme in Geriatrics (PGY2), is sometimes the missing element in training. The absence of human sensory cues, responses and emotions can negatively affect the trainee's perception of what is believable.

Ms Poh Chee Lien, facilitator and Assistant Director, NHG Education, shared that even though a set of responses is stored in the mannequin or simulation, "is it real then?" she asked. "Is this kind of training authentic? Will the trainees be able to pick up the essence of the process being taught?"

Dr Teo stressed that the learning outcomes should always be determined first before designing a simulation training programme. "If they are psychomotor skills, or set skills that doesn't change



(from left) Ms Poh Chee Lien and Assoc Prof Wong Teck Yee

much, then the use of technology is appropriate," said Dr Teo. "For soft skills such as interpersonal skills, teamwork, or retooling mindsets, it is difficult to depend on technology, and remove the 'human element' from it."

So what makes a simulation work? A/Prof Wong suggests that there are three integral dimensions - conceptual, physical and psychological-that contribute to the learner's perception of 'reality' need to be present in order for simulation training to be effective.

However, in most simulation training, psychological (or emotional) realism is the most neglected dimension, shared Dr Teo. "It is usually assumed that a physically realistic simulation training programme equates to authenticity, which is not the case."

"The most important thing is for the trainee to get an emotional sense of reality [during training]... The trainee must also be willing to engage emotionally, to suspend disbelief [that the simulation is not real] for the time being, in order to maximise the learning goals."

That is why, Dr Teo proposes that "psychological fidelity" should be factored in simulation design. She explained that it would help the trainee be emotionally engaged in the simulation, and be cognisant of his or her environment and the human relationships he or she develops with the other multi-disciplinary professionals; all of which cannot be replicated by artificial intelligence (AI).

"Essentially, ensuring 'authenticity' is not just the part of the simulation designer, the learners need to actively commit to engaging in the simulation in order for it to occur," said A/Prof Wong.

Associate Professor Wong Teck Yee is the Cluster Education Director of NHG Pre-Professional Education Office. He is also Assistant Dean of LKCMedicine, and Family Physician Senior Consultant at Tan Tock Seng Hospital.

Ms Poh Chee Lien is the Assistant Director with NHG Education, and is involved in faculty development, strategic planning, and interprofessional leadership programme curriculum development.

Dr Winnie Teo, a molecular biologist by training, has always had a keen interest in education, and is currently a manager in NHG Education.

Ms Tan Keng Teng is a Clinical Geriatrics Pharmacist at Tan Tock Seng Hospital and she is also the programme director for the National Pharmacy Residency Programme in Geriatrics (PGY2). She is also involved in research in interprofessional communication and collaboration, teaching of various professional groups and clinical management of elderly patient with complex medication related issues.

A Day of Discovery

By Dr Jeremy Heng



NHG Psychiatry Residency faculty and this year's graduates at the Singapore Discovery Centre

Graduating NHG (National Healthcare Group) Psychiatry residents celebrated the completion of their residency training by spending their day with some 35 Institute of Mental Health (IMH) patients at this year's NHG Psychiatry Residency Day, held on 3 February 2018.

Co-organised by NHG Psychiatry Residency and the Singapore Young Psychiatrists and Trainees, this year's annual day trip took the patients, psychiatry residents and faculty members to the Singapore Discovery Centre (SDC).

It was a day of fun and discovery as the participants picked up a new Eurasian dance, be a newscaster for the day, and also learnt about the history of Singapore and the new developments happening within the nation.

One patient shared about his previous national service experience as a Commando, and how going on the bus tour of the Singapore Armed Forces (SAF) Military Training Institute brought back many fond memories of his time in the Army.

Towards the end of the day, participants were treated to a movie screening of a local short film production titled: "Asam Pedas Ikan Salmon" at SDC – a heartwarming story of a Caucasian girl trying to win over the hearts and approval of her Malay boyfriend's conservative family through her cooking.

The tour ended with a lunch at the café by the lake at SDC. It was certainly a memorable day for patients, faculty members and administrative staff.

As a psychiatry resident, it is easy to forget that beneath the patient's illness lays a person, because



Patients and NHG Psychiatry residents had their hand at an 8-person quiz

we (doctors) spend so much time focusing on how to reduce or improve the patient's symptoms. When given opportunities to have fun and explore, it was rewarding to see that human aspect of the patients come to life, reminding us that they are also people just like us.

Dr Jeremy Heng is a third-year psychiatry resident who was the chairperson of this year's Annual NHG Psychiatry Residency Day organising committee. His interest is in Child and Adolescent Psychiatry, and is currently practising in the Department of Psychiatry in Singapore General Hospital.