

# Duty Visit Report



Ministry of Education  
SINGAPORE

27-30 April 2015

## Delegation from Hong Kong

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## **Executive Summary**

The experience gained from the overseas visit in April 2015 to the Ministry of Education (MOE), Singapore, by the delegation comprising representatives of the Committee on Professional Development of Teachers and Principals (COTAP) and awardees of the Chief Executive's Award for Teaching Excellence (CEATE) has provided valuable insights on COTAP's work.

The delegation is deeply impressed by the good communication, alignment and collaboration among the MOE, National Institute of Education (NIE) and local schools in Singapore in preparing and developing teachers and school leaders at different career stages. Rigorous control and deliberations are observed in their systems and processes, ranging from selection/ identification, to preparation, recruitment, mentoring and continuing development of teachers and school leaders. Relevant supporting tools and measures are amply devised to provide an enabling environment that facilitates and sustains the development of a robust teaching profession. Compared with Hong Kong, Singapore has a more centralised education system, which makes policy formulation and implementation more efficient and coherent.

While Singapore's centralised approach in taking care of the teaching profession is well appreciated, Hong Kong's versatility to provide teachers and school leaders with diverse opportunities and modes for professional development is highly valued. With a better understanding of the good practices in Singapore, COTAP will continue to make reference to Singapore's valuable experience when reviewing and enhancing the policies and practices relating to professional development of teachers and school leaders in Hong Kong.

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# **Report on the Duty Visit to the Ministry of Education, Singapore, on 27-30 April 2015**

## **I. Objectives of the duty visit**

1. An overseas visit to the Ministry of Education (MOE), Singapore, by the delegation comprising representatives of the Committee on Professional Development of Teachers and Principals (COTAP) and awardees of the Chief Executive's Award for Teaching Excellence (CEATE) was arranged on 27-30 April 2015 to capitalise on the experience of Singapore in promoting professional development of teachers and school leaders, and to establish networks for future collaboration with relevant parties.

2. It is expected that the experience gained will provide valuable insights on the three main domains of COTAP's work, i.e. initial teacher education, teachers' continuing professional development (CPD) and school leadership.

## **II. Brief summary of the duty visit program**

3. During the visit, meetings were arranged for professional exchanges with MOE, which was the host organisation, and four other organisations, including the Institute of Technical Education (ITE)<sup>1</sup>, Lee Kong Chian School of Medicine<sup>2</sup> in Nanyang

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<sup>1</sup> The **Institute of Technical Education (ITE)** offers full-time or part-time hands-on training with different duration of study for students aged 17 to 20 to attain qualifications in a wide range of industries. ITE has three campuses, namely, ITE College East, ITE College West and ITE College Central.

<sup>2</sup> The **Lee Kong Chian School of Medicine (LKCMedicine)**, established in 2010, is a joint medical school between Nanyang Technological University and Imperial College London. The LKCMedicine has been developing a modern curriculum characterised by its innovative approaches. There is extensive use of simulation, team-based learning (TBL) and e-learning to enhance learning and better prepare students for real clinical situations. Medical students are offered various opportunities to learn through simulations, refining their skills with the assistance of actors, and are benefitted from extensive use of technology, accessing e-learning materials through their iPad anywhere and at any time.

Technological University, National Institute of Education (NIE) and Academy of Singapore Teachers (AST). To better understand the implementation of national policies on professional development of teachers and school leaders in the local school context, two schools were visited, including the Wellington Primary School<sup>3</sup> and Jurong Secondary School<sup>4</sup>.

### **III. An overview of Singapore's policies and strategies relating to professional development of teachers and school leaders**

#### *A. The policy direction of nurturing students and developing the teaching profession*

4. MOE's vision of "*Thinking Schools, Learning Nation*" was first spelt out in 1997. Its mission of the Education Service is "*to mould the future of the nation, by moulding the people who will determine the future of the nation*".

5. To help students thrive in a fast-changing world, MOE has identified the **21st Century Competencies (21CC)**<sup>5</sup> (Diagram 1),

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<sup>3</sup> **Wellington Primary School (WPS)** was opened in 2001. It now has a current enrolment of 1500 students and more than 100 staff. WPS teachers have been putting much effort into promoting flipped classroom approach.

Mr Roslee Bin Jalie, the head of department of information and communication technology (ICT), was invited to a sharing session on ICT and its application to flipped classroom approach on 15 June 2015 in Hong Kong for the professional officers of the EDB and teaching staff of government schools.

<sup>4</sup> **Jurong Secondary School (JSS)** was founded in 1963. It was selected as one of the five pioneer Future Schools in 2007. The development of the FutureSchools@Singapore aims to enhance the diversity of educational offerings to cater to learners' needs and provide possible models for the integration of ICT. The plan aims to position Singapore as a centre of innovation.

JSS now has more than 100 staff. JSS teachers are actively engage in professional development. They organise themselves into various Professional Development Teams to meet weekly to collaborate and dialogue on pedagogical issues.

<sup>5</sup> At the centre of the **21CC framework** are core values. The middle ring signifies the social and emotional skills necessary for students. The outer ring represents the emerging 21CC essential for the globalised world.

which are well-versed by the MOE officials, NIE teacher trainers, school leaders and teachers.

**Diagram 1: 21st Century Competencies (21CC)**



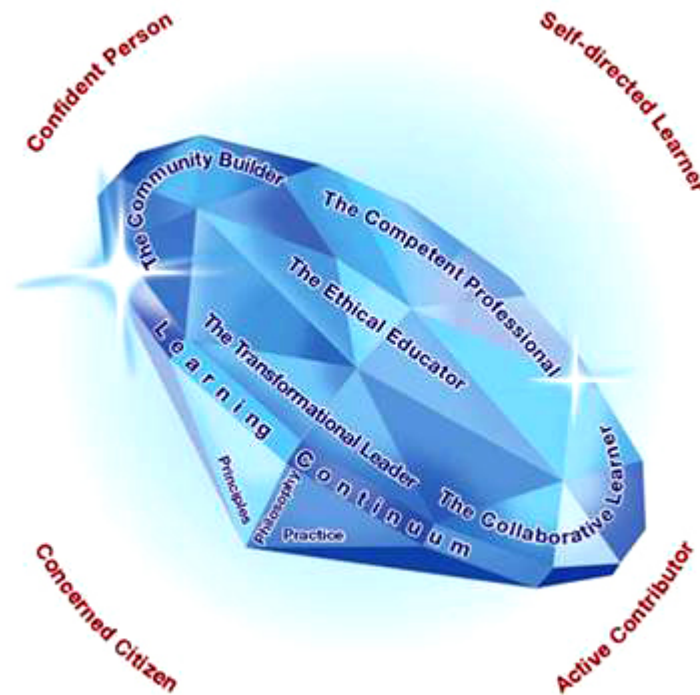
6. The development of 21CC aims to help students embody the **Desired Outcomes of Education (DOE)**, which are indeed Singapore's goals of education. In sum, each of the students who is schooled in the Singapore education system is expected to be a confident person, a self-directed learner, an active contributor, and a concerned citizen.

7. In line with 21CC, Singapore's **Teacher Growth Model (TGM)**<sup>6</sup>, (Diagram 2), which regards "Every Teacher, A Gem", reiterates DOE as the ultimate outcomes of teacher development, making it explicit that students are at the heart of teachers.

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<sup>6</sup> According to AST, the development of the TGM is still underway for the time being.

Diagram 2: Teacher Growth Model (TGM)



8. The TGM is a professional development model aiming at encouraging teachers to take ownership of their professional growth and personal well-being to nurture 21CC in students. Under the TGM, every teacher is expected to play five different roles: the Ethical Educator, the Competent Professional, the Collaborative Learner, the Transformational Leader, and the Community Builder.

#### *B. Teacher preparation*

9. In Singapore, it is the sole responsibility of MOE to take charge of all processes relating to recruitment, training, certification, appointment, and deployment of teachers for schools.

10. To get the best candidates, MOE recruits from the top one-third of each cohort and completely pays for teacher education in NIE. Shortlisted candidates earn a **stipend** while they receive pre-service training. The attrition rate of teachers is less than 3%

annually, which is considered very low.

11. To date, in Singapore, there have been about 33,000 education officers supporting over 360 schools for primary, secondary and post-secondary education.

12. NIE <sup>7</sup>, an autonomous institute within Nanyang Technological University, is the heart of Singapore’s teacher education. In 2008, NIE launched “**A Teacher Education Model for the 21st Century (TE21)**”, in which expectant skill sets for students and teachers were identified (Table 1).

**Table 1: Expectant skill sets for students and teachers in the 21st Century**

For Students...		For Teachers...	
Areas	Main considerations	Areas	Main considerations
<b>Learning and Innovation Skills</b>	<ul style="list-style-type: none"> <li>critical thinking and problem solving</li> <li>creativity and innovation</li> <li>oral and written communications</li> </ul>	<b>21st Century Literacies</b>	<ul style="list-style-type: none"> <li>information literacies and knowledge building</li> <li>media</li> <li>multicultural</li> </ul>
<b>Knowledge, Information, Media and Technology Literacy Skills</b>	<ul style="list-style-type: none"> <li>content mastery</li> <li>information literacy</li> <li>media literacy</li> <li>ICT literacy</li> </ul>	<b>21st Century Learning Environment</b>	<ul style="list-style-type: none"> <li>support learning communities that enable students to collaborate</li> <li>share best practices</li> <li>integrate 21st century skills into classroom practice</li> </ul>
<b>Life Skills</b>	<ul style="list-style-type: none"> <li>flexibility and adaptability</li> <li>initiative and self-direction</li> <li>teamwork and collaboration</li> <li>social and cross-cultural skills</li> <li>productivity and accountability</li> <li>leadership and responsibility</li> </ul>	<b>21st Century Curriculum and Instruction</b>	<ul style="list-style-type: none"> <li>support innovative pedagogies to integrate the use of technologies, inquiry and problem-based approaches and higher order thinking skills</li> </ul>
<b>Citizenship Skills</b>	<ul style="list-style-type: none"> <li>valuing of diversity</li> <li>global awareness</li> <li>ecological and environmental awareness</li> <li>values, ethics and professionalism</li> </ul>		

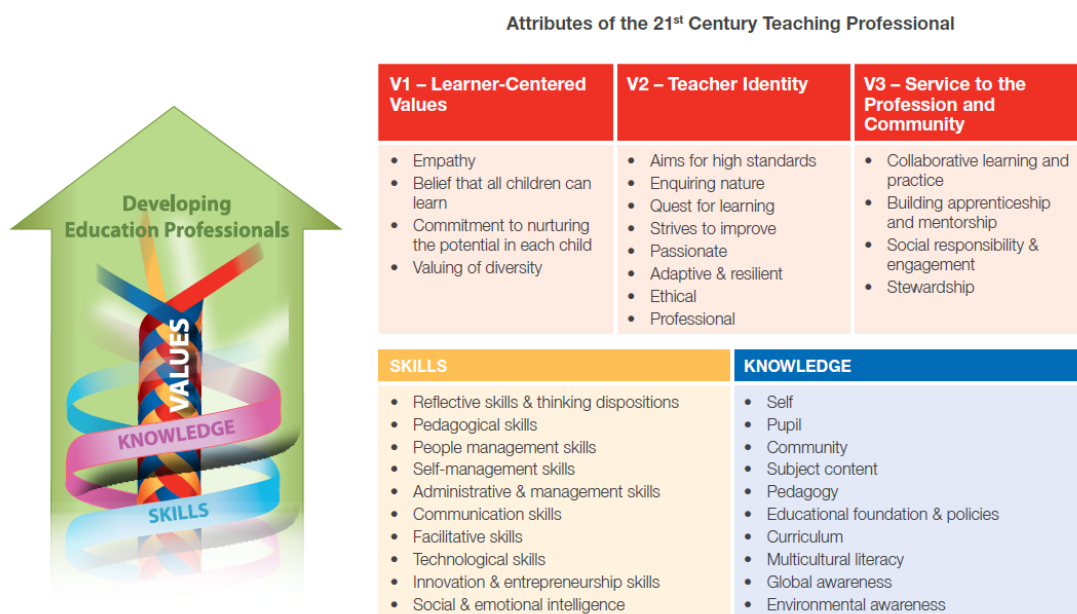
<sup>7</sup> The full-time initial teacher preparation programmes provided by NIE include:

- 4-year full-time undergraduate teacher education programmes [i.e. Bachelor of Arts (Education) and Bachelor of Science (Education)]
- 1-year full-time Post-graduate Diploma in Education (PGDE)
- 2-year full-time PGDE(Physical Education); and
- 2-year full-time Diploma in Education.



13. After defining the skill sets for teachers and students in TE21, NIE went on to advocate **V3SK** (Diagram 3), which represents the underpinning philosophy of teacher education and guides the design, delivery, and enhancement of NIE programmes.

**Diagram 3: V3SK**



14. NIE also stipulated the **Graduand Teacher Competencies (GTC)** (Table 2) to set out the basic professional competence of NIE graduands.

**Table 2: Graduand Teacher Competencies (GTC)**

<i>Performance Dimensions</i>	<i>Core Competencies</i>
<b>Professional Practice</b>	(1) nurturing the whole child (2) providing quality learning of child (3) providing quality learning of child in CCA (4) cultivating knowledge <ul style="list-style-type: none"> <li>◆ with subject mastery</li> <li>◆ with reflective thinking</li> <li>◆ with analytic thinking</li> <li>◆ with initiative</li> <li>◆ with creative teaching</li> </ul>

	<ul style="list-style-type: none"> <li>◆ with a future focus</li> </ul>
<b>Leadership &amp; Management</b>	<ul style="list-style-type: none"> <li>(5) winning hearts and minds <ul style="list-style-type: none"> <li>◆ understanding the environment</li> <li>◆ developing others</li> </ul> </li> <li>(6) working with others <ul style="list-style-type: none"> <li>◆ partnering parents</li> <li>◆ working in teams</li> </ul> </li> </ul>
<b>Personal Effectiveness</b>	<ul style="list-style-type: none"> <li>(7) knowing self and others <ul style="list-style-type: none"> <li>◆ tuning into self</li> <li>◆ exercising personal integrity and legal responsibilities</li> <li>◆ understanding and respecting others</li> <li>◆ resilience and adaptability</li> </ul> </li> </ul>

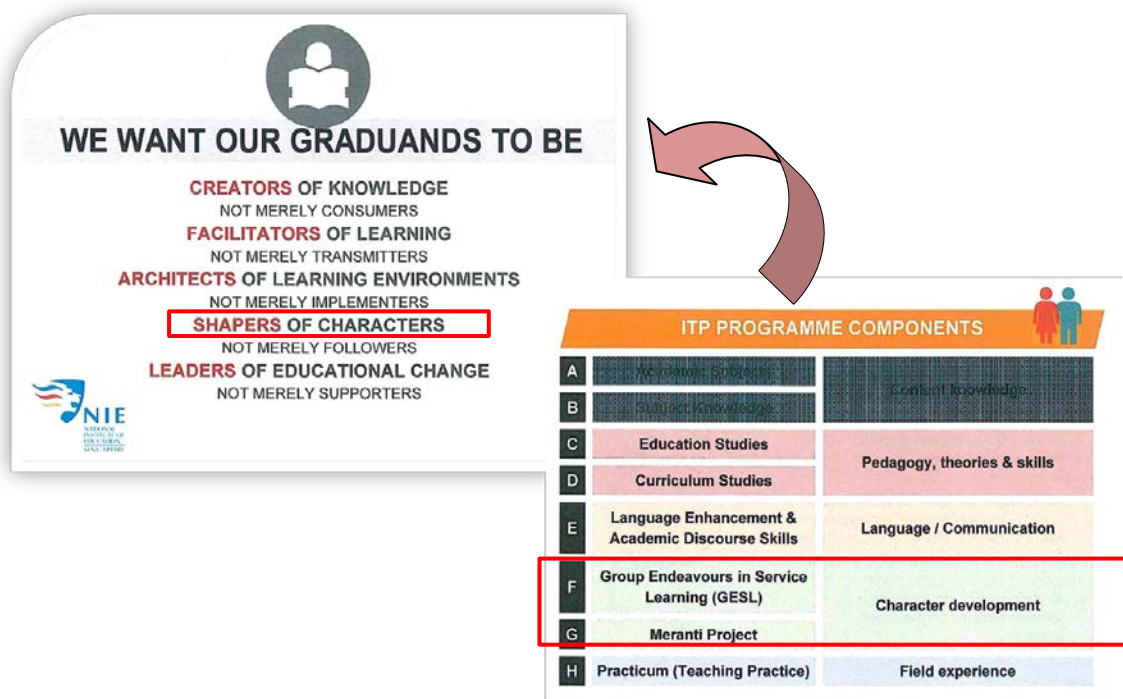
15. In Singapore, due emphasis is given to nurturing the whole child and cultivating students as concerned citizens. In line with this, NIE has explicitly spelt out that the graduands are expected to be “**shapers of characters**”. As reflected in the design of NIE programmes, “Group Endeavours in Service Learning (GESL)<sup>8</sup>”, “Meranti Project”<sup>9</sup> and “Character development” are incorporated as components (Diagram 4).

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<sup>8</sup> The GESL is a service-learning community outreach programme for NIE student teachers.

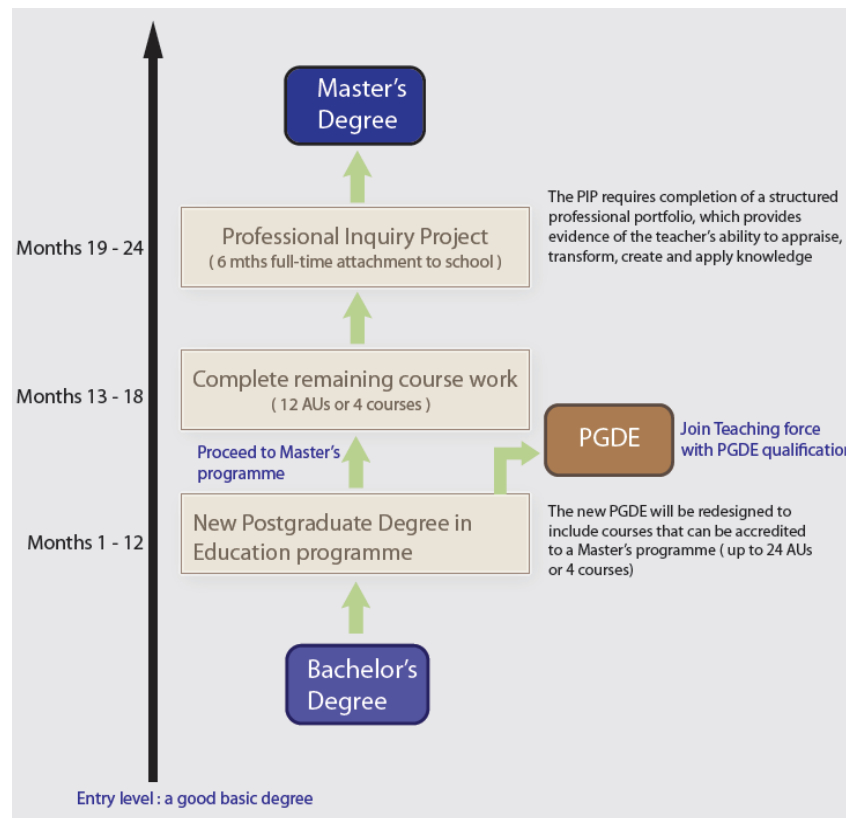
<sup>9</sup> **Meranti Project** is an MOE-funded personal and professional development programme specially tailored for student teachers to help them develop better self-awareness, increase civic-mindedness, grasp strategies for coping with being a teacher, and affirm the choice of teaching as a career.

**Diagram 4: Graduands as shapers of characters**

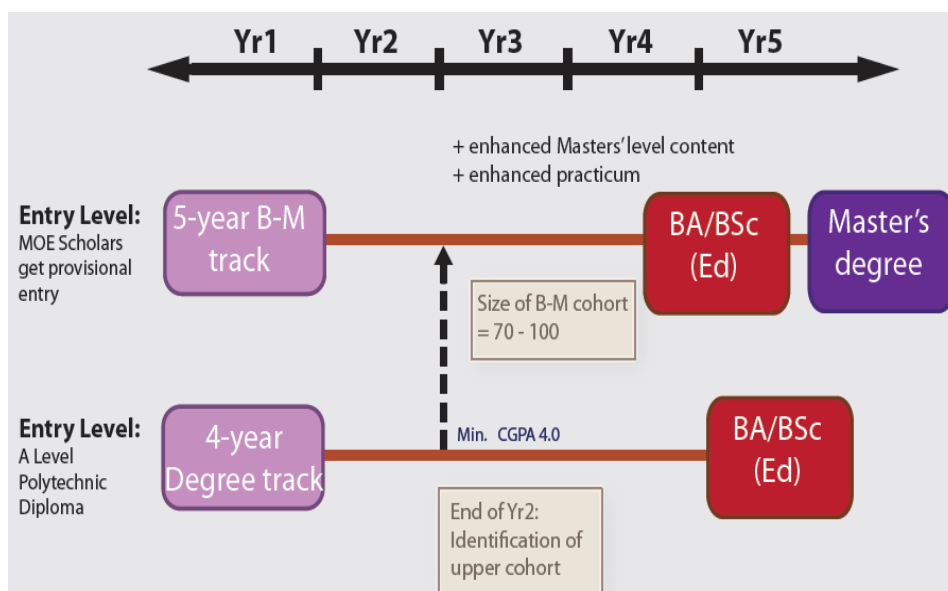


16. To further enhance the quality of teaching, NIE proposed in TE21 two **accelerated pathways** for top 10% of the cohort: 2-year full-time Master's programme with PGDE exit (Diagram 5) and 4+1 Bachelor-Master's programme (Diagram 6). These two accelerated pathways aim to groom high-achieving pre-service teachers who will be holders of master's degree with sound knowledge and skills in their subject areas before they commence teaching in schools.

**Diagram 5: 2-year full-time Master's programme with PGDE exit**



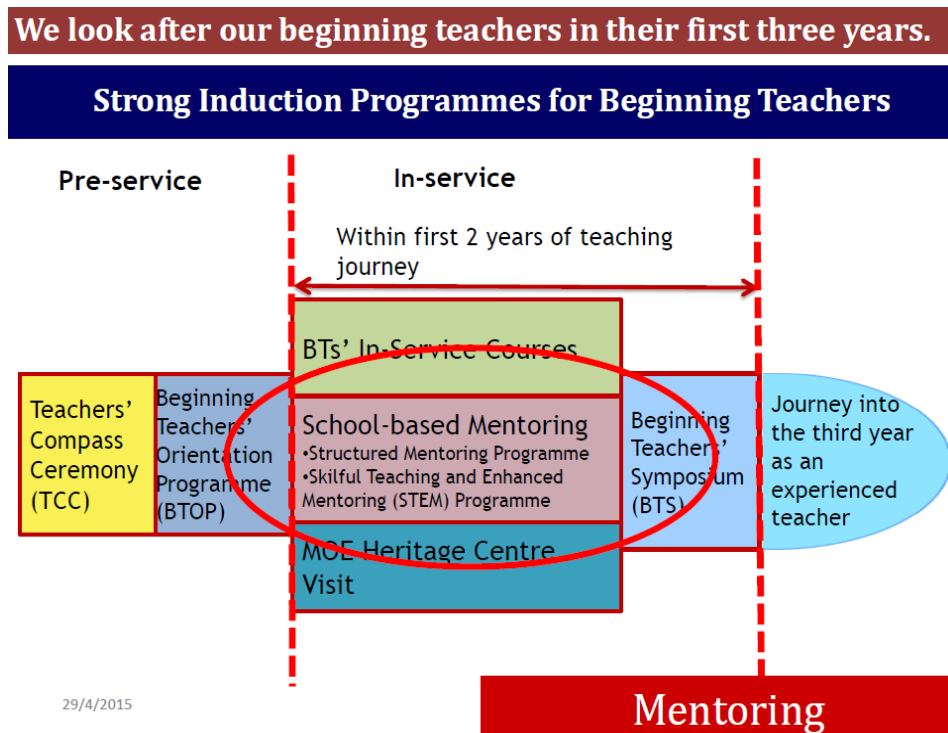
**Diagram 6: 4+1 Bachelor-Master's programme**



C. Mentorship and induction

17. MOE is committed to looking after beginning teachers in their first three years of teaching (Diagram 7).

**Diagram 7: Mentoring beginning teachers**



18. Before deployment to schools, pre-service teachers are invited to participate in the Teachers' Compass Ceremony, which is a significant event to reaffirm their obligations as a teacher. At the ceremony, each participant is presented with a compass (Diagram 8), carrying the symbolic meaning that teachers have a duty to serve as a moral compass to their students, pointing the direction to the "true north." The Teachers' Compass Ceremony is more like an "oath-taking assembly" to strengthen beginning teachers' mission to bring out the DOE in students as stated in 21CC.

## Diagram 8: Compass for pre-service teachers



19. Then within the first two years of teaching, beginning teachers are provided with school-based Structured Mentoring Programme (SMP) which pairs them with experienced teacher mentors<sup>10</sup> trained by NIE. These expert teachers are given released time to help beginners learn their craft. The SMP enables beginning teachers to learn practical knowledge and skills in teaching, learning and classroom management and deepen their understanding about the ethos and values of the teaching profession. During the SMP, beginning teachers also attend courses offered by NIE and MOE to sharpen the skills relating to classroom management, counseling, parent relations, etc. The 2-year SMP indeed serves as an “extended practicum” and their performance is used to determine confirmation in the service. In the third year of teaching, mentoring is still provided for beginning teachers to chaperon their journey as experienced teachers.

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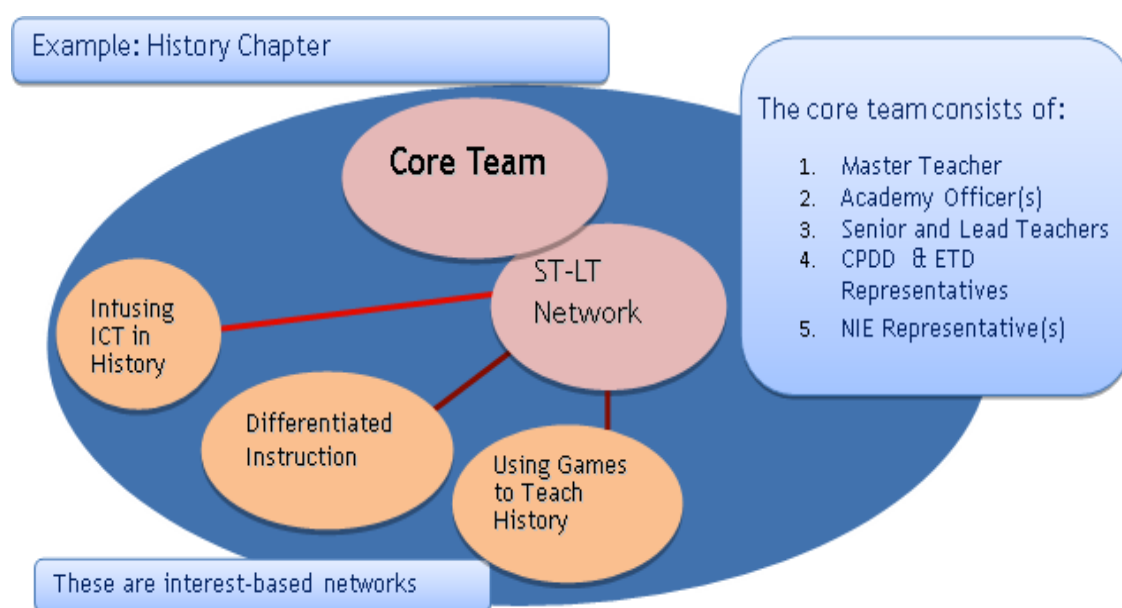
<sup>10</sup> There are three formalised mentor roles defined in the SMP: (1) **Mentor Coordinator** as the leader of the school’s mentoring programme serving like a “mentor for mentors”; (2) **Mentor** to look after the well-being, skills development and professional growth of a beginning teacher; and (3) **Mentor (Specialised)** to coach beginning teachers in specific areas of skills development.

### D. Professional learning communities

20. Under MOE, AST was established to steer the professional development of education officers through fostering a strong teacher-led culture of professional collaboration and excellence centered on the holistic development of students.

21. One major role of AST is to set up and support **Networked Learning Communities (NLC)**. The major form of NLC comprises **Subject Chapters**<sup>11</sup> (Diagram 9). Other forms include: **interest-based NLC**<sup>12</sup> and **role-based NLC**<sup>13</sup>. To facilitate online exchange and knowledge construction in and across NLC, the **One Portal All Learners (OPAL)** is developed.

**Diagram 9: Subject Chapter in operation**



<sup>11</sup> **Subject Chapters** (e.g. History Chapter, Junior Math Chapter, Physics Chapter, etc.) are subject-based NLC across schools. They are supported by a Core Team and the Senior Teacher – Lead Teacher (ST-LT) network.

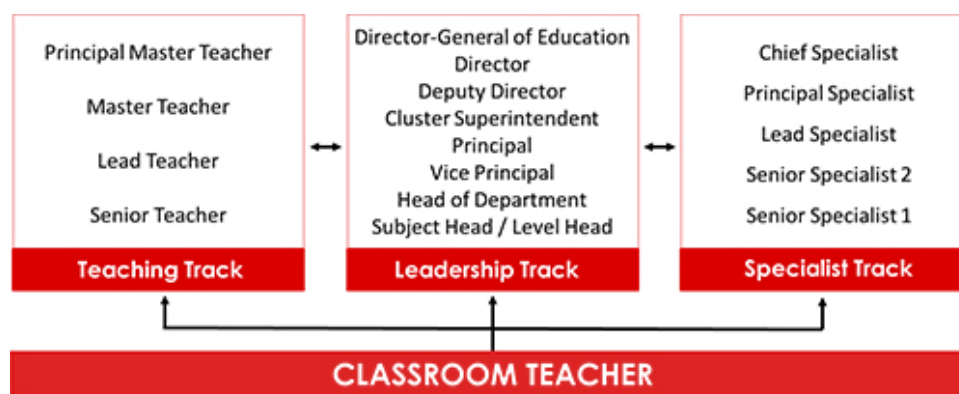
<sup>12</sup> **Interest-based NLC** are set up in support of new government initiatives.

<sup>13</sup> **Role-based NLC** aim to bring together practitioners playing the same role, such as Master Teachers, Lead Teachers, and School Staff Developers, for professional sharing and dialogues.

### E. Teachers' continuing professional development

22. To cater for teachers with different aspirations, MOE has established **three career tracks** (Diagram 10). The **Teaching Track** provides advancement opportunities for teachers who are keen to further develop their pedagogical capability. The **Leadership Track** paves way for teachers to take on leadership positions in schools and then MOE. The **Specialist Track** is for teachers who are inclined towards more specialised areas. There is flexibility of lateral movements across career tracks. Education officers can choose to move across the different careers tracks, as long as they meet the criteria required of the post.

**Diagram 10: Three career tracks for teachers**



23. MOE has offered various types of **scholarships**. While a few are awarded to top-achievers of undergraduate studies to prepare them for leadership positions in MOE, the rest are mainly for opening up opportunities for accomplished serving teachers to take up top teaching or specialist positions.

24. In Singapore, there is a provision of **100-hour training entitlement** per year for each teacher. Other provisions that support CPD include **Time-tabled time**<sup>14</sup>, **Teacher Work**

<sup>14</sup> **Time-tabled time**, which is the dedicated time for professional learning, is structured into teachers' daily routine to engage them in lesson planning, reflection and CPD activities.



## **Attachment (TWA)<sup>15</sup>, and Learning and Development Scheme (LDS)<sup>16</sup>.**

### *F. School leadership*

25. MOE sees leadership as a key enabler for strong schools, thus giving due attention and resources to identify and groom teachers with leadership potential at an early stage for leadership positions.

26. Potential school leaders have to undergo several rounds of interviews conducted by senior MOE officials. They also need to participate in a Leadership Situation Exercise, which is a two-day intensive simulation test to gauge their leadership competencies and readiness to take on leadership positions. After the rigorous selection process, shortlisted candidates are required to attend a 6-month Leaders in Education Programme (LEP) offered by NIE, during which their salaries are fully paid.

27. LEP aims to develop school leaders (about 30 to 40 in a cohort) with the mindset and capability to transform schools into innovative learning communities that nurture innovative students and teachers in an evolving, complex, new economy. LEP exposes potential school leaders to challenging leadership experiences in the contexts of schools and other industries. Knowledge creation and innovation are thus the central themes in LEP, which is future-oriented with rich content, including education coursework, Creative Action Project (CAP)<sup>17</sup>, overseas visits, etc.

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<sup>15</sup> The **TWA** scheme, implemented by MOE since November 2003, aims to broaden teachers' experiences and perspectives through local and overseas attachments in both the public and private sectors, such as banking and finance, media, and social enterprise, with the duration from one to four weeks.

<sup>16</sup> Introduced in 2007, the **LDS** allows teachers to claim up to SGD400 or SGD700, depending on their years in service, to defray the cost incurred in their CPD.

<sup>17</sup> **CAP** requires participants to create a school for 15 years based on their projections of future trends and discussions with stakeholders. CAP aims to challenge mental models, attend to the environment, and provide an opportunity for participants to think deeply about how to meet educational goals in future.

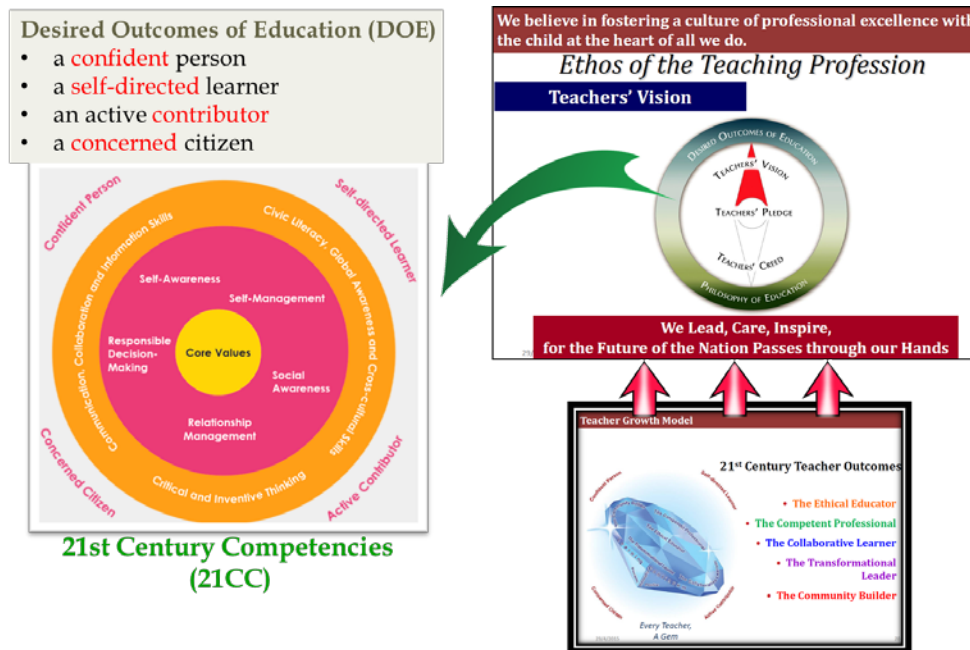
#### **IV. Insights gained and application in the context of Hong Kong**

28. In comparison, Singapore has a more centralised education system, which makes policy formulation and implementation more efficient and coherent. MOE, working collaboratively with NIE and AST, has rigorously monitored various processes from selection/ identification, to preparation, recruitment, mentoring and continuing development of teachers and school leaders. Relevant supporting tools and measures are amply devised to provide an enabling environment that facilitates and sustains the development of a robust teaching profession with students at their heart. The insights gained by the delegation are summarised as follows:

*Good alignment in policy direction to prepare students and teachers for the 21<sup>st</sup> Century*

29. In the journey to prepare students and teachers for the 21<sup>st</sup> Century, MOE's good effort made in aligning policy direction to maximise the commitment and contribution at all levels is worth noting. As shown in Diagram 11, in defining 21CC for students, MOE has put due emphasis on DOE, i.e. nurturing students as confident persons, self-directed learners, active contributors and concerned citizens. The compass needle of teachers' pledge and vision, which symbolically refers to teachers' duty to care and inspire students, also directs towards DOE. Further, the four DOE are reiterated in the TGM for teacher development. Apparently, DOE are the common goals of educational policies in Singapore. In pursuit of DOE, teachers, school leaders, NIE teacher trainers and MOE officials work in close alignment and synergy at classroom, school, institutional and system levels. In Hong Kong, more could be done to line up policy direction with shared educational goals so that all stakeholders could be firmly anchored in achieving the same goals.

**Diagram 11: DOE as the common goals of educational policies**



*Close partnership between NIE, MOE and local schools to prepare quality teachers*

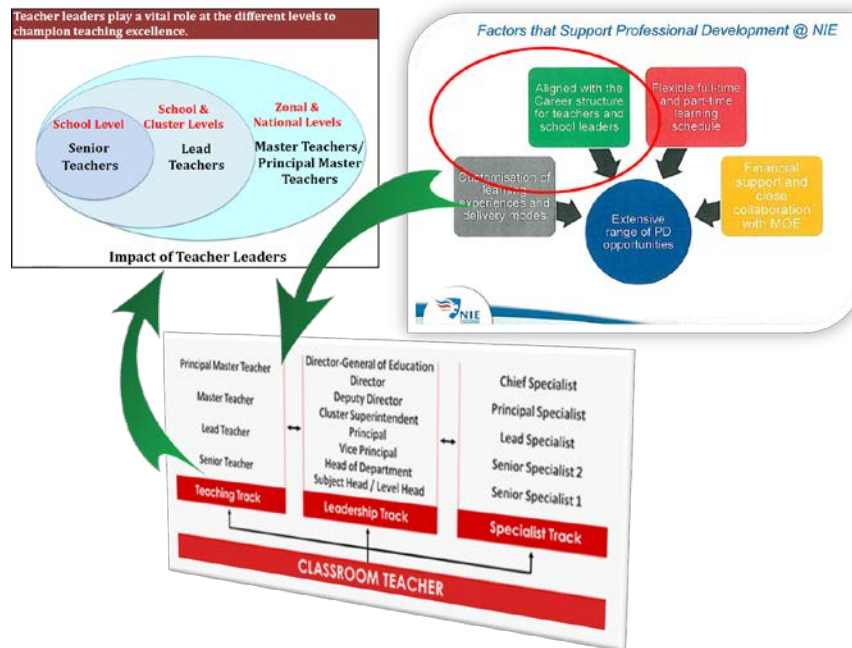
30. The theory-practice gap has long been a major defect of initial teacher preparation around the world. To tackle the problem, NIE, being the sole provider of teacher training in Singapore, works in close partnership with MOE and schools under MOE to develop teacher preparation programmes. Teacher mentors are directly trained by NIE to support student teachers in their practicum and beginning teachers in their first few years of teaching. As such, NIE is actively engaged in the mentoring scheme which is set up and operated at school level. The strong tripartite relationship between NIE, MOE and local schools ensures that the design and delivery of NIE's programmes are geared to the expectations of MOE and needs of schools, and enables all stakeholders to work together to provide student teachers with the best support in their transitions from theory to practice. This definitely reinforces COTAP's deliberation to serve as a platform for interactive exchange and collaboration between stakeholders such as the EDB, Teacher Education Institutions, schools and parents. For instance, in the recent development of teacher standards, various stakeholders have been actively engaged to draw up the competencies required of beginning,

competent and accomplished teachers to meet the challenges of the 21<sup>st</sup> Century classrooms, which is certainly a positive step taken by COTAP to line up collaborative effort. Other than that, COTAP will put effort into establishing close partnership with relevant stakeholders, such as Teacher Education Institutions and non-governmental organisations, in the setting up of a one-stop portal for sharing of CPD information and resources.

*Clear career structure to provide directions for professional growth and advancement*

31. MOE's career structure is highly inspiring to COTAP (Diagram 10). It allows teachers with different aspirations and strengths to contribute their utmost effort to education. It also guides teachers' professional development at different career stages (Diagram 12). Aligned with this career structure, professional development programmes offered by NIE are appropriately designed to support teachers in pursuit of career advancement. Further, teachers at different stages of maturity (e.g. Senior Teachers, Lead Teachers, and Head of Department) are brought together and supported by their superordinate in the career structure for professional sharing and exchange through role-based NLC to facilitate knowledge management and transfer across schools, which is indeed an effective strategy to sustain a high-quality teaching profession. In Hong Kong, professional learning communities (PLC) have been thriving in and across schools. Ample opportunities for CPD are also offered by various parties, including the EDB, tertiary institutes and non-governmental organisations. With reference to Singapore's practices, effectiveness and relevance of PLC and CPD could probably be further enhanced through setting up a career structure with clear directions for professional growth and advancement.

**Diagram 12: A career structure that support professional growth and advancement**



*Early identification of potential school leaders for intensive leadership training*

32. MOE believes that high-quality teaching and strong student performance require effective school leaders. Therefore, potential school leaders are identified and nurtured by MOE at an early stage rather than being left to chance. They then undergo intensive training with a range of experiences to prepare for school leadership and transformation. This enables MOE to maintain a stable supply of high-performing school leaders to offset natural wastage. In Hong Kong, training opportunities are opened to teachers with aspiration for principalship although they must meet the exit requirement to attain relevant certification. As such, aspiring principals could be more proactive in pursuit of career advancement. For better succession planning, an alternative measure could be considered at system level to identify the most suitable teachers for intensive leadership training so that the right persons could be prepared at an early stage. COTAP will also continue to explore new types and modes of leadership training to ensure that our school leaders are better equipped to meet future challenges.

33. In sum, while Singapore's centralised approach to taking care of teachers and school leaders from is well appreciated, Hong Kong's versatility to provide teachers and school leaders with diverse opportunities and modes for professional development offered by schools, school sponsoring bodies, tertiary institutes, non-governmental organisations etc. is highly valued. COTAP will keep abreast of, as well as continuously review and share with relevant stakeholders, the professional development needs of teachers and school leaders through collecting views from the territory-wide system survey at regular intervals. With a better understanding of the good practices of Singapore, COTAP will also make reference to Singapore's experience when evaluating and enhancing the policies and practices relating to professional development of teachers and school leaders in Hong Kong.

## V. References

1. 21<sup>st</sup> Century Competencies of Students  
<http://www.moe.gov.sg/education/21cc/>
2. Teacher Education Model for the 21<sup>st</sup> Century (TE21) (NIE, 2009)  
[http://www.nie.edu.sg/files/spcs/Te21\\_online\\_ver.pdf](http://www.nie.edu.sg/files/spcs/Te21_online_ver.pdf)
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