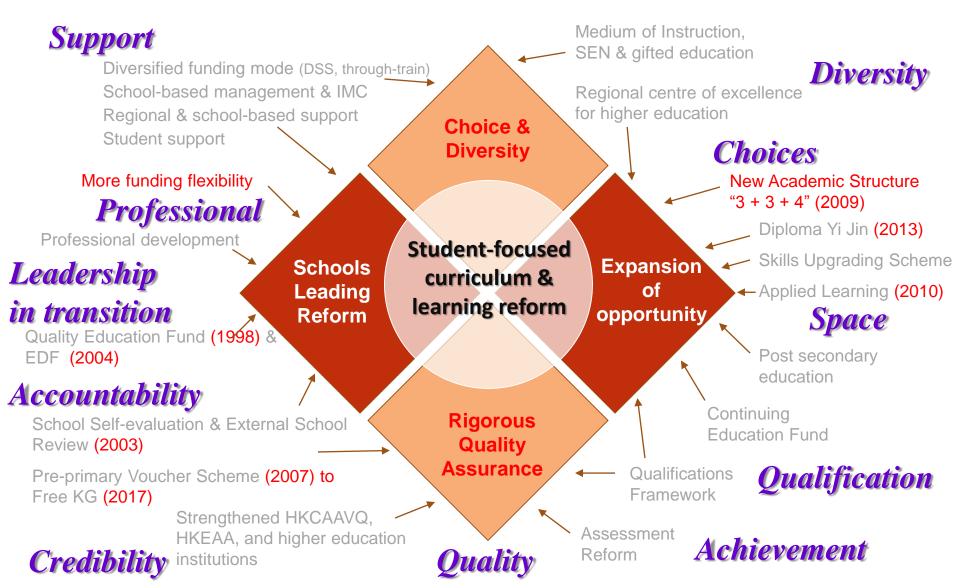


### **Curriculum Reform -**

**Looking Back and Looking Forward** 

Sheridan Lee
2 December 2017

# Holistic and Coherent Education Reform for Lifelong Learning & Whole-person Development since 2000



# East *Meets* West *Rich & Stimulating Environment*



# UNESCO 4 pillars of education









To know

To do

To live together

To be

#### Learning to Learn

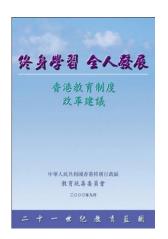
Learning to Do

- Learning to Live Together
- Learning to Be

- Solid academic base
- Comprehension
- Ability to learn and analyse
- Skills
- Capacity to act
- Ability to apply knowledge
- Communications
- Conflict resolution
- Cultural sensitivity
- Multi-lingualism
- Self-esteem
- Emotional intelligence
- Critical thinking
- Cultural awareness

## Policy Context: Aims of Education, Education Reform (2000)





To enable every person to attain all-round development (全人發展) in the domains of ethics, intellect, physique, social skills and aesthetics according to his/her own attributes so that he/she is capable of lifelong learning (終身學習), critical and exploratory thinking, innovating and adapting to change; filled with self-confidence and a team spirit, willing to put forward continuing effort for the prosperity, progress, freedom and democracy of Learning for Life their society, and contribute to the future and Learning through Life well-being of the nation and the world at large.

## How did we get here?

Resolving Tensions and Maintaining Dynamic Equilibrium Short-term and Long-term Desirability and Localisation Vs Feasibility Globalisation Assessment for Selection Vs. Tensions between Academic, Assessment for Enhancing the Personal, Social, Economic **Effectiveness of Student Learning** & Vocational, Political, Environmental and Quality of Teaching: Goals of the Curriculum Reliability & Validity Balanced/Principled **Considerations** Knowledge Transmission Vs Central Curriculum Vs **Knowledge Creation** School-based Curriculum Competition Vs Specialist Development Vs Co-operation Whole-person Development: Breadth Vs Depth Uniformity Vs Diversity and Flexibility

### **Implementation Strategies**

- 1. Curriculum documents as central guidelines
- 2. Research and development projects (including Seed Projects, Benchmarking studies, and evaluation studies to inform practice and improvement)
- 3. Professional capacity building for heads, middle managers, teachers, librarians, career guidance masters –
- diversified modes of self-learning, structured learning, learning by doing (workshop, on-site external support), collaborative learning;
- whole-school/department/subject levels;
- Interpreting the curricula, knowledge enrichment, pedagogy, assessment

### Implementation Strategies

- 4. Targeted learning and teaching resources one-stop portal
- **5.** Partnership with different stakeholders, community organisations and universities
- **6.** Communication, ongoing feedback and evaluation different types of visits and studies

### **Policy Coherence Assessment Reform**

The Journey of Assessment Reform towards The Journey of Assessment of, for & as learning building synergy of assessment of,

Curriculum reform since 2000 through which to promote assessment for learning (AfL)

\* Assessment as an integral part of the curriculum

#### **Major change** to system-level assessment to promote AfL

\* Territory-wide System Assessment (TSA) first administered at P3 in 2004, at P3 & P6 in 2005 and at P3, P6 & S3 in 2006

Using standardsreferenced **reporting** in the Hong Kong Diploma of Secondary Education (HKDSE) Examination, to replace normreferenced reporting

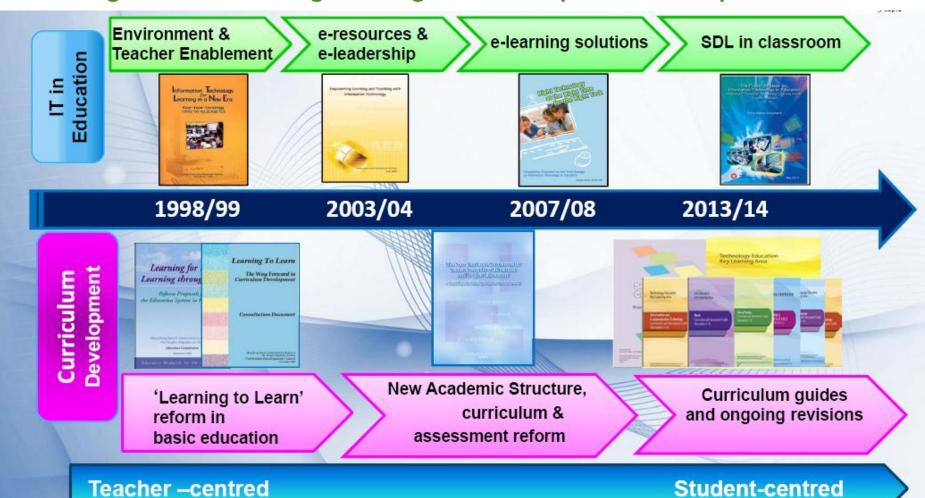
**Assessment** as a key component of the HKDSE Examination

assessment as learning (AaL) through such initiatives as OLE and SLP to develop students into selfdirected learners



# Policy Coherence IT in Education

**Coherent Development of IT in Education Strategies and Curriculum Reform for Fostering Students' Lifelong Learning and Whole-person Development** 



# Teacher Competencies Framework

Teaching & Learning





Student Development **School Development** 





Professional Relationships & Services

#### Six Core Values

Belief that all students can learn

Love and care for students

Respect for diversity

Commitment and dedication to the profession

Collaboration, sharing and team spirit Passion for continuous learning and excellence

**Basic Premise: Personal Growth and Development of Teachers** 

### **School-based Professional Support**



Theme/Foci of Support

School Improvement,
Learning & Teaching
Catering for Learner Diversity

NSS Curriculum, Liberal Studies, KG, NCS (Chi), SEN SDL (e-learning), Assessment Literacy, STEM, NCS (Chi & Math), SEN, Interface between KG/Pri, Promoting Student Support

### Inter-organisational & inter-sectoral Collaboration

In the course of reform, we need to engage multiple partners within and beyond the education system to build consensus, capacity and momentum for sustainable and meaningful change. We forge partnerships and engage different organisations from different sectors in collaboration through different avenues.



# Achievements and Impact

### **International Recognition**

#### From good to great

How the World's Most Improved Systems Keep Getting Better, McKinsey & Co.

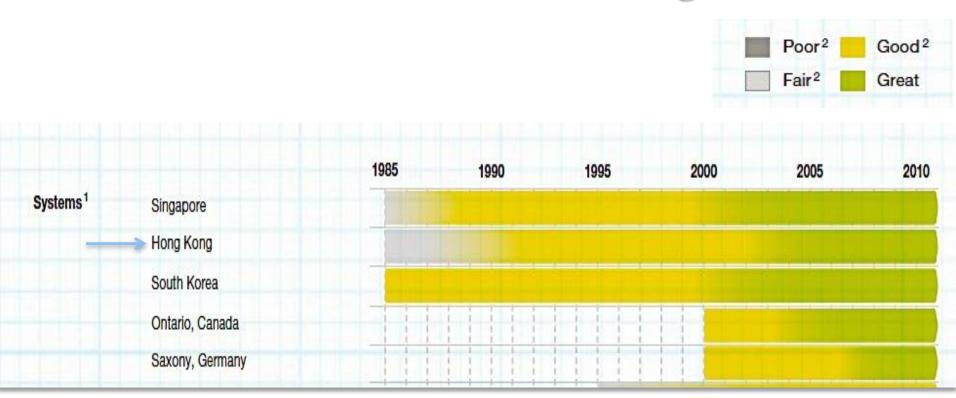




In exemplary curriculum reform...coherent & deeply considered

Oceans of Innovation, Institute for Public Policy Research

# One of the 20 Education Systems with the Fastest Rate of Progress



Hong Kong has moved from "Fair" (1983-88) to "Good" (1989-99), and eventually to "Great" (2000+)

# Student Achievements in International Assessments PISA / PIRLS / TIMSS

PISA	2000	2003	2006	2009	2012	2015
Reading (Chinese)	6 <sup>th</sup>	10 <sup>th</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	2 <sup>nd</sup>	2 <sup>nd</sup>
Mathematical	1 <sup>st</sup>	1 <sup>st</sup>	3 <sup>rd</sup>	3 <sup>rd</sup>	3 <sup>rd</sup>	2 <sup>nd</sup>
Scientific	3 <sup>rd</sup>	3 <sup>rd</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	2 <sup>nd</sup>	9 <sup>th</sup>
No. of participating countries/regions	43	41	57	65	65	72

TIMES	1999		2003		2007		2011		2015	
TIMSS	P4	S2	P4	<b>S2</b>	P4	S2	P4	S2	P4	S2
Mathematical		4 <sup>th</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	1st	4 <sup>th</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	2 <sup>nd</sup>	4 <sup>th</sup>
Scientific		15 <sup>th</sup>	4 <sup>th</sup>	4 <sup>th</sup>	3 <sup>rd</sup>	9 <sup>th</sup>	9 <sup>th</sup>	8 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>
No. of participating countries/regions	3	38	4	.9	5	i9	6	3	5	7

PIRLS	2001	2006	2011
Reading (Chinese)	14 <sup>th</sup>	2 <sup>nd</sup>	1st
No. of participating countries/regions	35	45	45

PISA	2015
Collective ProblemSolving	3rd
No. of participating countries/regions	50+

# International Recognition of HKDSE (2016)

UCAS Tariff	HKDSE	Advanced Placement (AP)	GCE Advanced Level (GCE AL)	International Baccalaureate (IB)
56	<b>5</b> **		<b>A</b> *	H7
52	5*			
48	5		Α	H6
40			В	
32	4		С	H5
28		5		
24		4	D	H4
20		3		
16	3	2	E	
12		1		H3

## Data Speaks - NSS Choice and Performance in Elective Subjects

### <u>Greater freedom</u> in subject choice (2009/10 – 2014/15)

#### 90% 86% 84% 83% 81% 82% 80% 80% 79% 78% → More freedom to choose elective subjects of interest ── More engaged in learning elective subjects of their choice 70% 2009/10 2011/12 2012/13 2014/15

Data source: Secondary School Curriculum Implementation Survey (2009/10 to 2014/15); responses above are from Secondary 4 students.

### Better performance in HKDSE Examination (2012 to 2016 HKDSE)

<b>4</b> 4 🗆	年份	·   入數   /	出席	百分率 Percentage							
科目 Subject	Year		人數 No. sat	5**	5*+	5+	4+	3+	2+	1+	U
	2012	429 448	424 878	1.1	4.3	10.6	32.3	59.8	83.1	94.5	5.5
	2013	418 854	413 990	1.2	4.6	11.2	33.2	59.6	83.1	95.0	5.0
所有甲類學科 All Category A subjects	2014	389 195	384 014	1.2	4.8	11.8	33.7	59.9	82.8	94.9	5.1
7 iii oategory 7 oasjooto	2015	363 894	359 079	1.3	5.0	12.2	34.2	60.2	83.7	95.5	4.5
	2016	333 817	329 118	1.3	5.1	12.5	35.5	61.6	85.1	95.5	4.5

Data source: HKDSE Examination Report.

### Data Speaks - NSS

### Positive Impact of Senior Secondary Curriculum on Further Studies

Subject/Curriculum Component	Competence/Skill Acquired	2015
<b>Liberal Studies</b>	Knowledge base	77%
	Thinking from multi-dimensional perspectives	77%
	Awareness towards social issues	76%
	Critical thinking	72%

#### **NSS Impact Study:**

S6 graduates pursuing post-secondary studies indicated that Liberal Studies has a <u>positive impact on</u> their post-secondary studies

#### **HKDSE Candidate Script Study:**

The study on HKDSE candidate scripts in Liberal Studies indicated that students demonstrated good performance in <u>critical thinking</u> and <u>multiple perspective taking</u>. These are strongly associated with the candidates' results in the HKDSE Examination.

52.1	Organising intormation skins	0/70
	Academic integrity	65%

#### Data Speaks -NSS

# Positive Impact of Senior Secondary Curriculum on Further Studies

Subject/Curriculum	Competence/Skill Acquired	2015
Component		

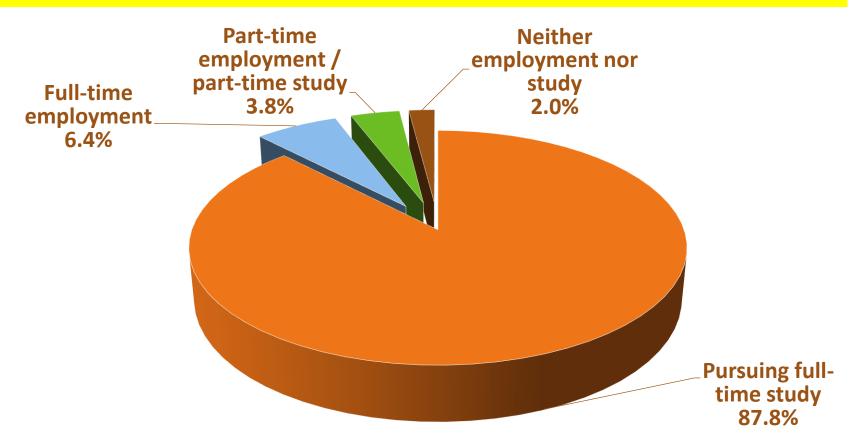
#### **NSS Impact Study:**

S6 graduates pursuing post-secondary studies indicated that the different components of the senior secondary curriculum have had a positive impact on their post-secondary studies.

<b>Elective Subjects</b>	Understanding of the knowledge & concepts of the subject	92%		
	Ability to apply the subject knowledge & concepts to other programmes	83%		
	Interest & motivation towards studies			
	Future career aspiration	65%		
OLE	Collaboration skills	70%		
	Communication skills	70%		
	Problem solving Skills	67%		
SBA	Organising information skills	67%		
	Academic integrity	65%		

### **Multiple Pathways of S6 Graduates**

In 2015, close to <u>90%</u> of S6 graduates continued to pursue <u>full-time study</u>



### Data Speaks – NSS

# Positive Impact of Senior Secondary Curriculum on Employment

Over 80% of employers agreed that S6 graduates under the New Academic Structure met or exceeded requirements in 18 out of 20 aspects.

### A. Language Proficiency

Chinese (99%)

Putonghua (95%)

English (83%)

#### **B.** Numeracy

Preparation of data (84%)

Comprehension of data (82%)

#### C. Generic Skills

Ability to use IT at work (97%)

Self-learning ability (83%)

Teamwork (91%)

Analytical mind & judgement (83%)

Ability to establish an effective network (98%)

Creativity (98%)

Time management (88%)

Problem solving ability (78%)

#### D. Attitudes

Self-confidence (94%)

Knowledge of current affairs (93%)

Work ethic (96%)

Commitment (98%)

Politeness (98%)

Perseverance (92%)

Initiative & drive (75%)

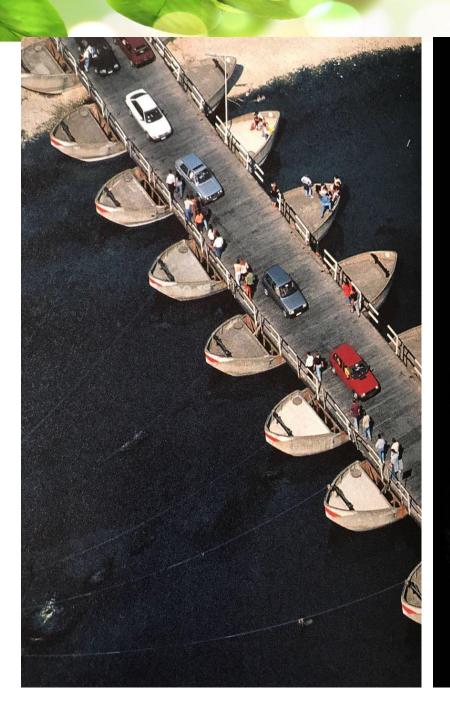
Data Source: Employer Survey (2015).



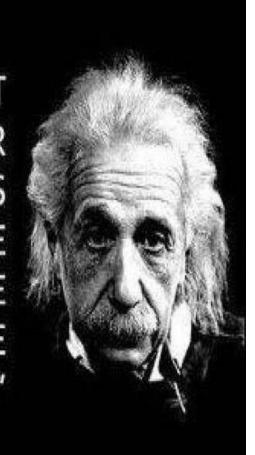
### Looking Forward







"WE CANNOT SOLVE OUR PROBLEMS WITH THE SAME THINKING WE USED WHEN WE CREATED THEM"



Hong Kong is becoming polarised and further divided... important to build a humanitarian society ...

**Politically** 

... enhanced level of sociopolitical awareness amongst many people in society ...

#### Morally

... future
workplace
requires
individuals
possess
positive
values and
attitudes e.g.
perseverance and
being innovative
and adaptable to

changes. ....

Amid
the Rapidly
Changing World
in the 21st Century

**Technologically** 

#### **Socially**

... diversity in the demographic make-up of Hong Kong and the trend of an ageing population...

#### **Culturally**

... Hong/Kong plays the role as a super-connector and acts in concert with the Belt and Road Initiative and Mainland

Economically enterprises to go global ...

... the demand on computer, mathematics, architecture and engineering related fields will rise tremendously....

Booklet 1,SECG (May 2017)

# Towards 2030 and Beyond – The Future is NOW...



 KG1
 P1
 S1
 S4
 University At work (age 12)

 (age 6)
 (age 12)
 (age 15)
 (age 18)
 (age 25)

**2017** 2018 2019 **2020** 2021 2022 2023 2024 2025 **2026** 2027 2028 **2029 2030** 2031 **2032** 2033 ...

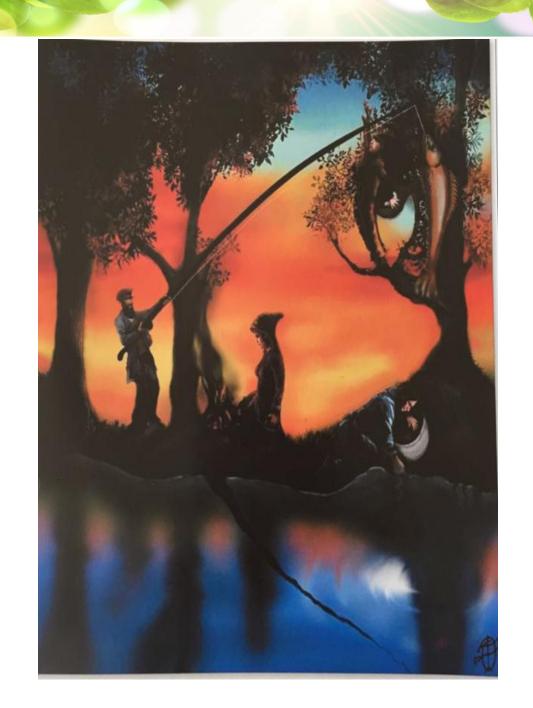
#### Questions to Ponder

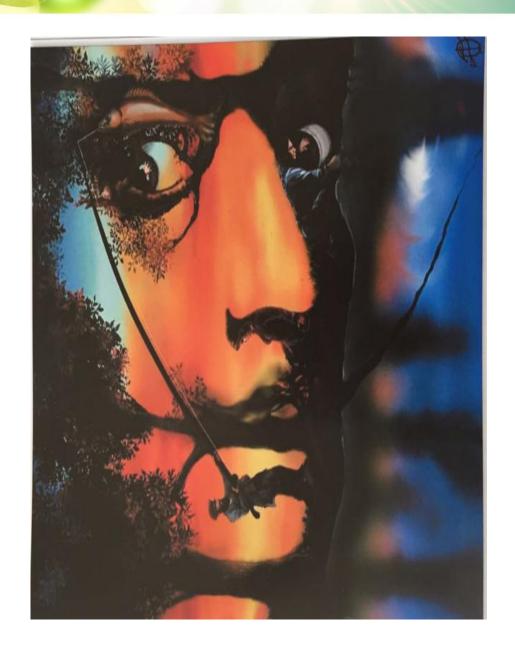
- 1. How can we arouse students curiosity and motivation to engage in meaningful learning?
- 2. How can we fortify students' sense of value about themselves and in connection with humanity?
- 3. How can we nurture students aspirations that build on their own interests and strengths that connect with their own fuure life?
- 4. How can we honour student achievements beyond universtiy admission?
- 5. How can we help students better connect learning with their own future from both local and global perspectives?
- 6. How can we create space for more integrative learning through open and flexible time tabling arrangements?

# Building a sustainable future beyond 2030

To build a sustainable future, we need to commit ourselves to the well-being of individuals and that of one's family and the community, which is reminiscent of a Chinese adage that portrays an ideal servant and master of the future: 「修身、齊家、治國、平天下」 meaning "To achieve universal peace, one has to provide good governance for one's country; to provide good governance, one has to bring harmony to one's family; to bring harmony, one has to be virtuous."

Partnership with You





#### Curriculum development is a never ending journey!

君子真強不息

A tribute to our schools for their unwavering support and dedication and to all who have committed to their professional role in the reform!



Thank you!