

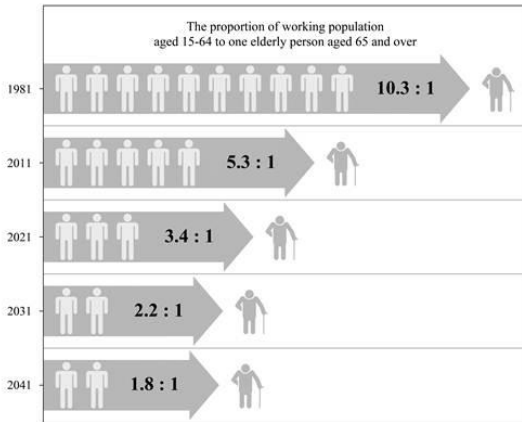
E-learning to enhance human resources and human capital for Hong Kong's future

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Our context

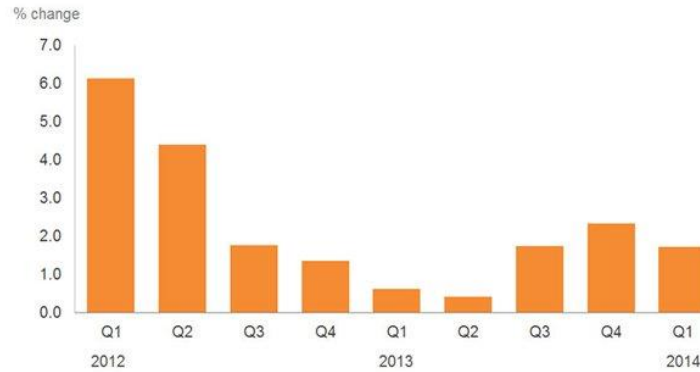
Much Heavier Burden Imposed by Ageing Population

Chart 5



Note: Excluding foreign domestic helpers.
Source: Demographic Statistics Section, Census and Statistics Department.

Increase in unit value of Hong Kong exports



Source: Hong Kong Trade Statistics, HKSAR Census and Statistics Department

Tough competition

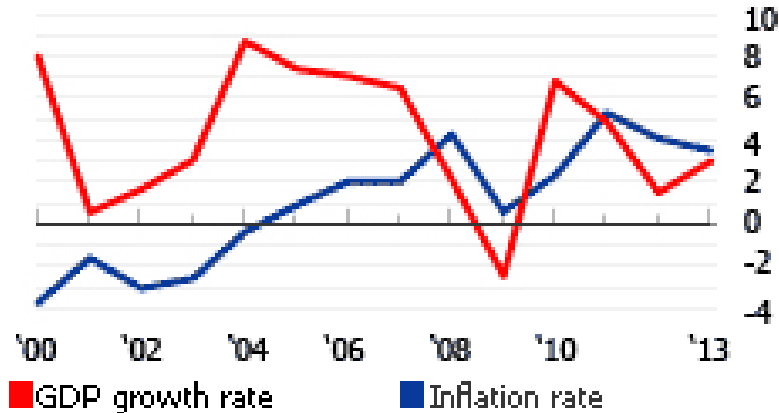
IMD World Competitiveness Ranking 2015

2015	2014
1 USA	1
2 Hong Kong	4
3 Singapore	3
4 Switzerland	2
5 Canada	7
22 Mainland China	23

Source: IMD

SCMP

GDP Growth & Inflation Rate (%)

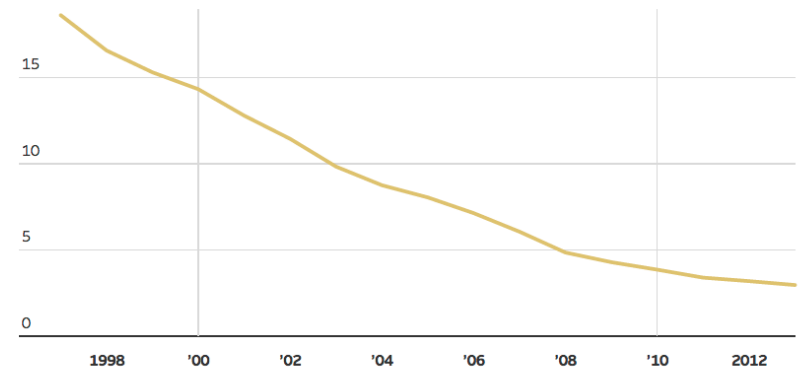


■ GDP growth rate

■ Inflation rate

Source: IMF

Hong Kong GDP as a percentage of Mainland China's GDP



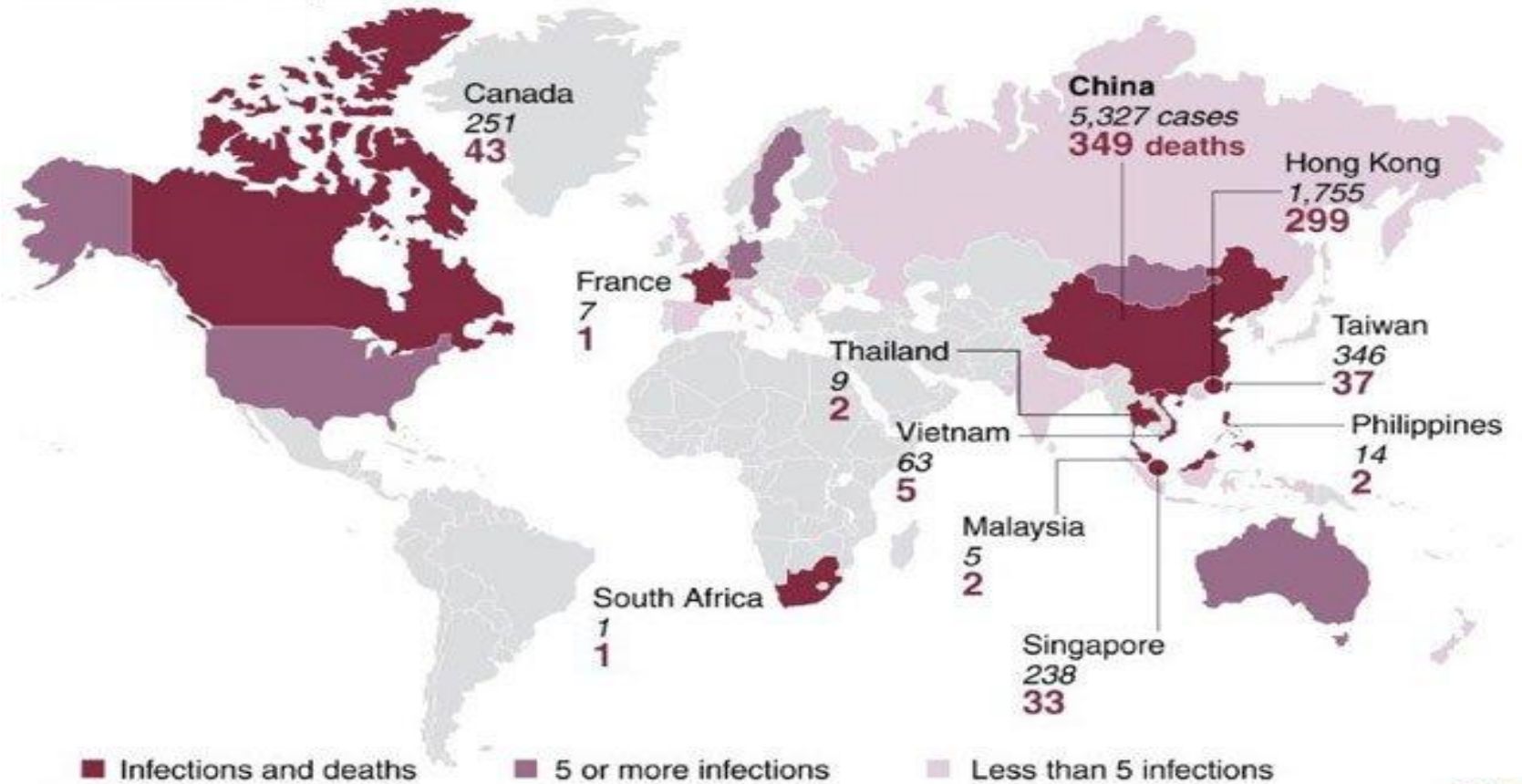
Source: World Bank

Natural and human disasters

SARS 2003: deadly virus

774 deaths reported

November 2002 – July 2003



Human resources & human capital underpin the overall well-being of HK's future

- Context:
 - rapid social change, ageing population
 - knowledge economy, global connectivity
- Key concerns:
 - Economic well-being
 - Social well-being
 - ***Resilience & sustainability***

Human Resources ≠ Human Capital

- HR: workforce with knowledge and skills
- HC: creativity to produce value
- Formal/non-formal/informal education
- Early childhood → work place → lifespan

Learning needs to be ...

- Dynamic
- Just-in-time
- Fit-for-purpose

Encompassing
multiple Levels:

- Individual
- Family
- Community
- Organization
- Societal

**HENCE must
leverage the
power &
potential of
networked
learning**

What kind of e-learning?

- Promote social equity
- Build social resilience
- Sustain an ageing society's wellness
- Enhance productivity
- Foster innovative industry
- Drive entrepreneurship
- Create a thriving techno-social and business innovation ecosystem

Learning/e-learning capacity: “solve problems & create value”

- Authentic problem solving in novel situations
- Designed learning experiences

TIMSS, PIRLS, PISA and ICILS

Hong Kong has among the highest between-school variance in achievement



e-learning
—?→ promote
social equity

R&D

multi/inter-disciplinary
research on **Learning
environment & task
design**

Policies & Strategies to
sustain & scale
**ICT-enabled
Learning innovations**

Challenges to bridging the digital divide

- Fast cycles in digital devices
- Software platforms & applications
- New concepts & functions
- Costs of renewal /replacement
- Technical & learning support

R&D in e-Learning for Equity

- Integrated socio-technical systems
- Scalable ICT-enabled learning innovations
- Multi-scale open exchange and peer learning
- Top-down support for bottom-up innovations
- Special needs

e-learning —for—> ageing society:

Family & social networks

- Social media & internet
- Self-support groups
- Care communities

e-learning —for—> societal resilience:

Time-critical & networked

- Early warning systems of impending crisis
- Leveraging government monitoring mechanisms
- Crowdsourcing through social media
- Multi-sector rapid response networks
- Self-organizing crisis management
- Damage control & recovery

R&D for Resilience & productivity

- Citizen science and information systems
- Government, professional, community networks
- Information flow, communication, coordinated action
- socio-technical systems to support self-organizing collaborative innovation and marketing networks

e-learning —>innovative industry + entrepreneurship

- knowledge management systems to connect innovation communities with venture capital to form innovation & entrepreneurship hubs

Core technologies for socio-technical systems

- Social media, networking & social network analysis
- Information & knowledge management systems
- Open access repositories, digital libraries
- Search engine optimization & information retrieval
- Data-mining, learning analytics, complex visualization
- Transmedia EL applications, simulation and modeling
- Maker technology (collaborative authoring & production tools for multimedia, animation, virtual reality applications and 3D printing for learners).