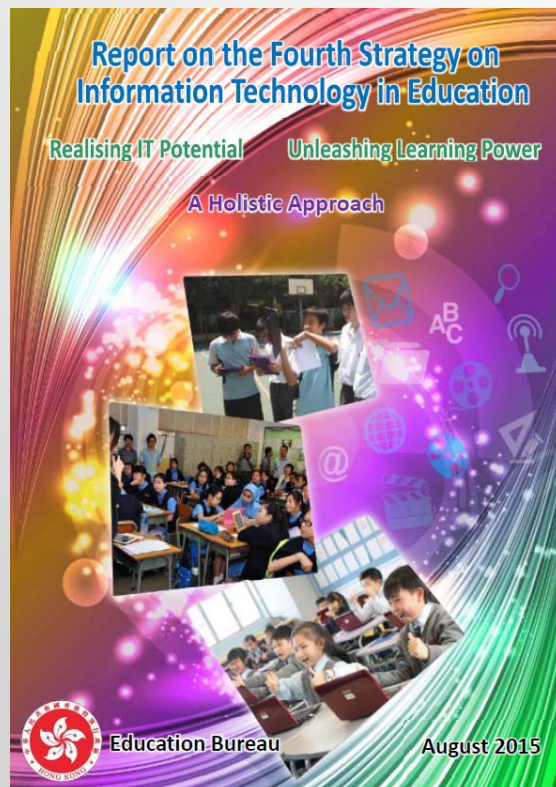


# Microsoft in Education Hong Kong Forum 2018

## Development of IT in Ed in Hong Kong



Dr W C HO  
ITE Section, EDB  
28 April 2018

# What jobs are at risk due to computerisation ?

- *...As technology races ahead, low-skill workers will reallocate to tasks that are non-susceptible to computerisation, i.e., tasks requiring creative and social intelligence. For workers to win race, however, they will have to acquire creative and social skills.*

Nedelkoska, L. and G. Quintini (2018), “Automation, skills use and training”, OECD Social, Employment and Migration Working Papers, No. 202, OECD Publishing, Paris.  
<http://dx.doi.org/10.1787/2e2f4eea-en>

- Across the **32 countries**, close to **one in two jobs** are likely to be significantly affected by automation, based on the tasks they involve. But the degree of risk varies.
- About **14%** of jobs in OECD countries participating in Survey of Adult Skills (PIAAC) are **highly automatable** (i.e., probability of automation of over 70%).
- In addition, another **32%** of jobs have a risk of between 50% and 70% pointing to the possibility of **significant change in the way these jobs are carried out** as a result of automation – i.e. a significant share of tasks, but not all, could be automated, **changing the skill requirements for these jobs**.

# Top skills currently needed in the workplace

# PISA 2015 Results—Collaborative problem solving

Our 15-year-old students ranked the **third**

<https://www.oecd-ilibrary.org/docserver/9789264285521-en.pdf?expires=1523605841&id=id&accname=guest&checksum=6F0588206A204AE4BFC60E1E63C65F5C>

# Six Cs of Deep Learning

Character

Communication

Citizenship

Creativity

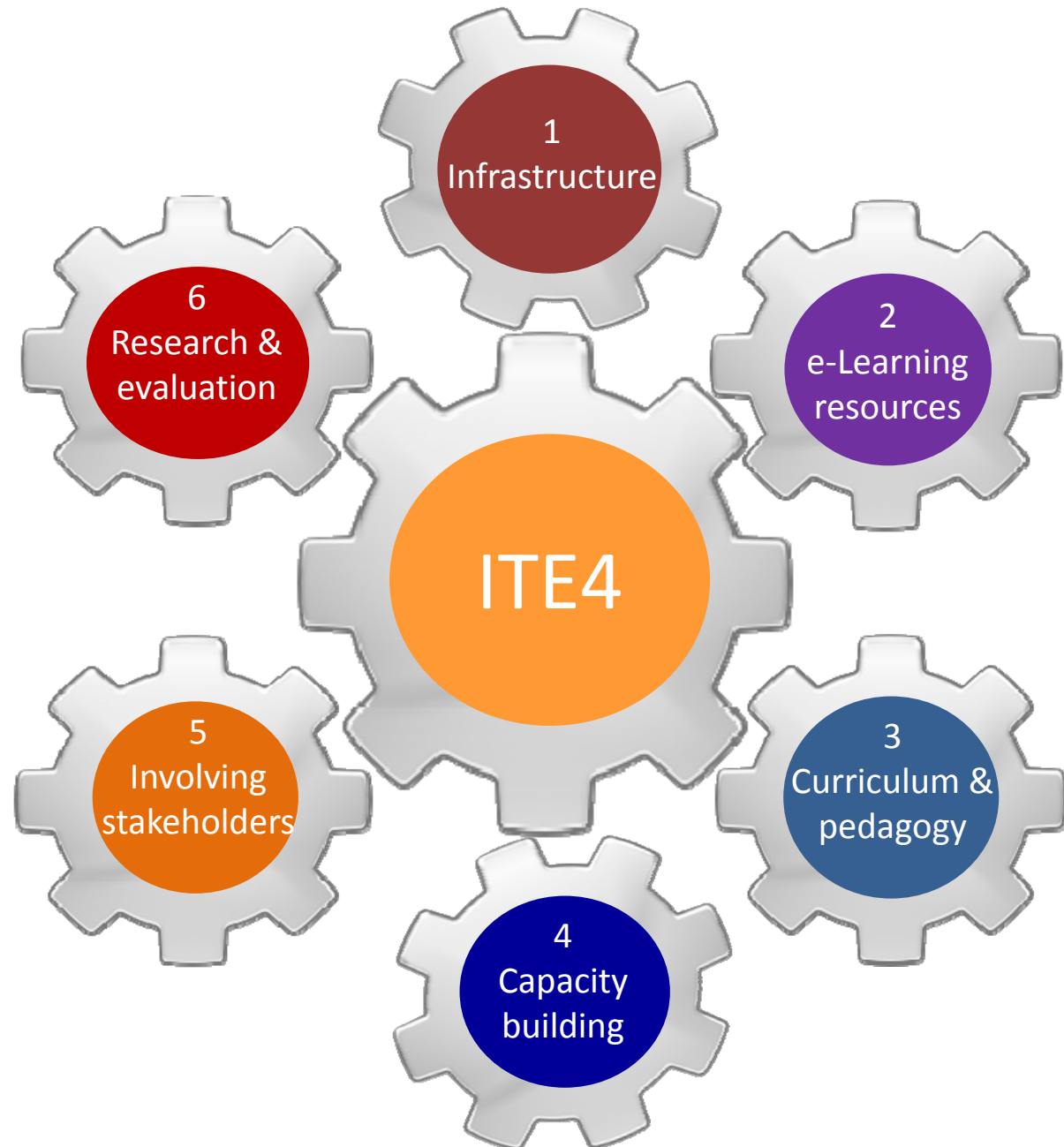
Collaboration

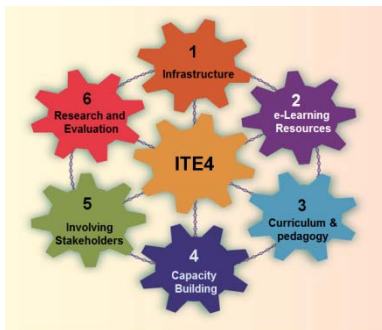
Critical  
Thinking

# The Fourth Strategy of IT in Education (ITE4)



## The 6 Actions





## Action 2: e-Learning Resources

### e-Textbooks

- There are **49 sets** of e-textbooks on Recommended e-Textbook List (eRTL), among which 34 sets are from the e-Textbook Market Development Scheme (EMADS)

### e-Resources provided by EDB and HKEdCity

- One Stop Portal (EDB)
- EdConnect (HKEdCity) – Single Sign-on
- EdBookShelf (HKEdCity)
- eREAD Scheme (HKEdCity)
- Student Assessment System (STAR) (EDB)
- e-Resources Acquisition Project (eREAP) (HKEdCity)

#### Subjects covered:

##### Primary Level

- Chinese Language
- English Language
- Mathematics
- General Studies
- Putonghua
- Physical Education

##### Junior Secondary Level

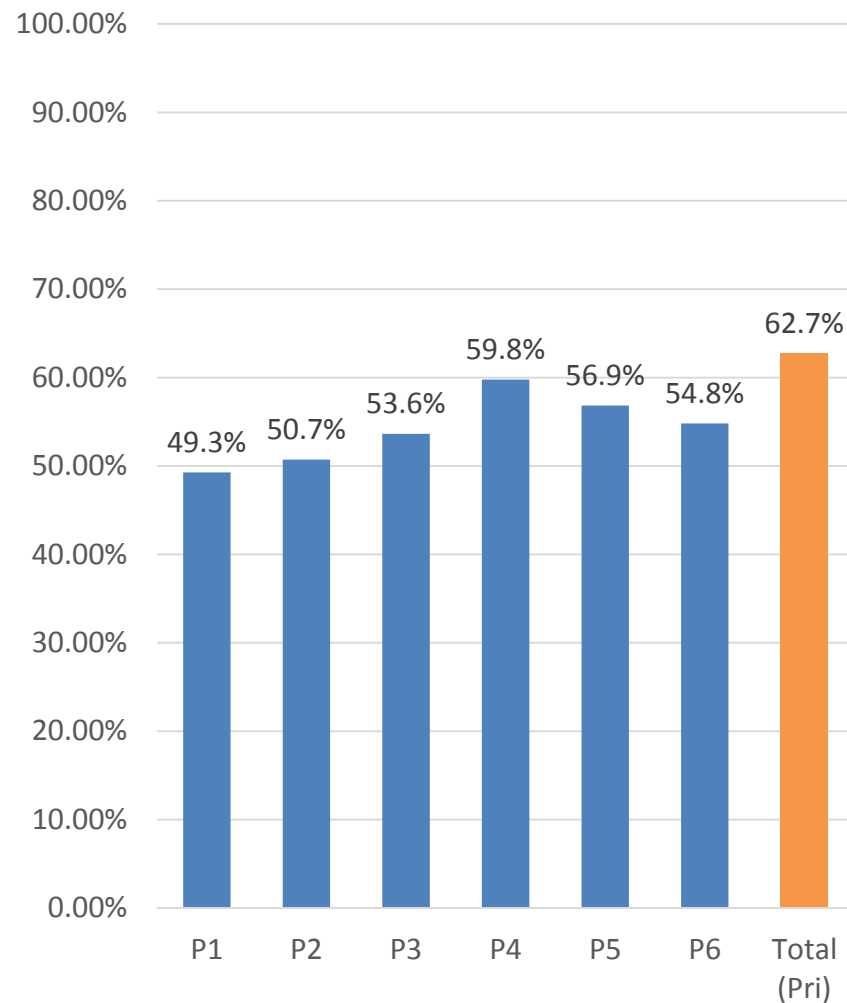
- Chinese Language
- English Language
- Mathematics
- Life and Society
- Computer Literacy
- Geography
- History
- Science



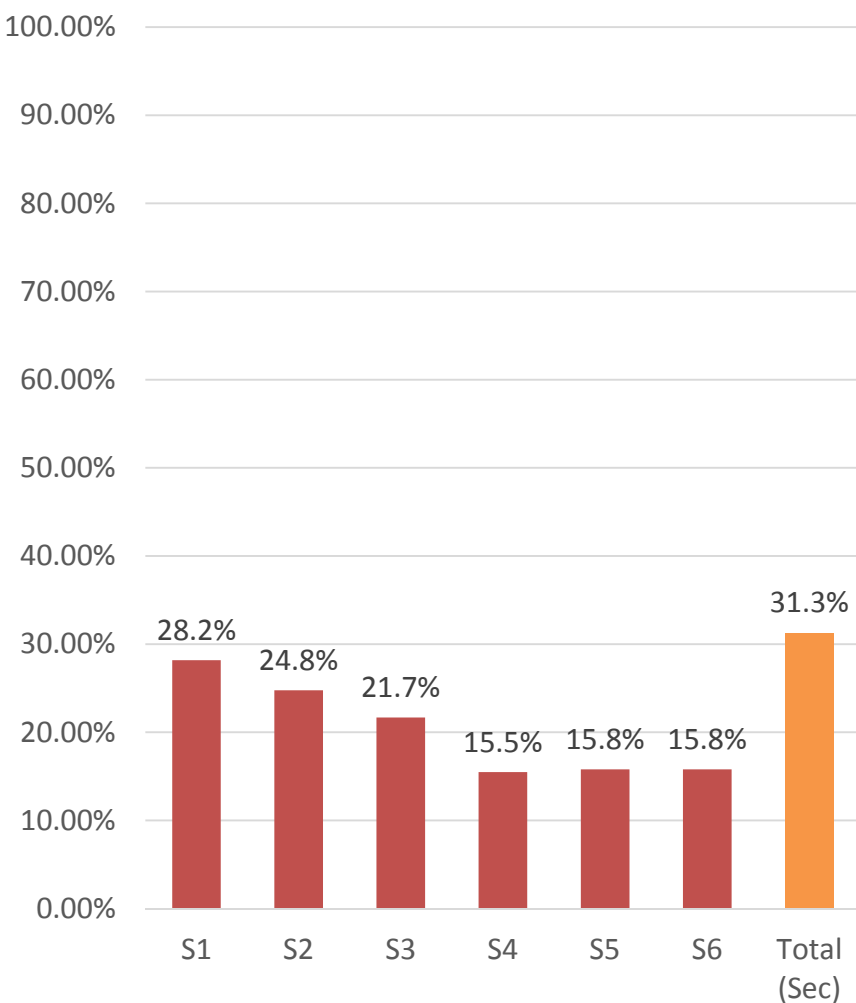
# Progress of e-textbook's adoption across education levels

Source: School Survey on ITE (2016/17)

## Primary Schools



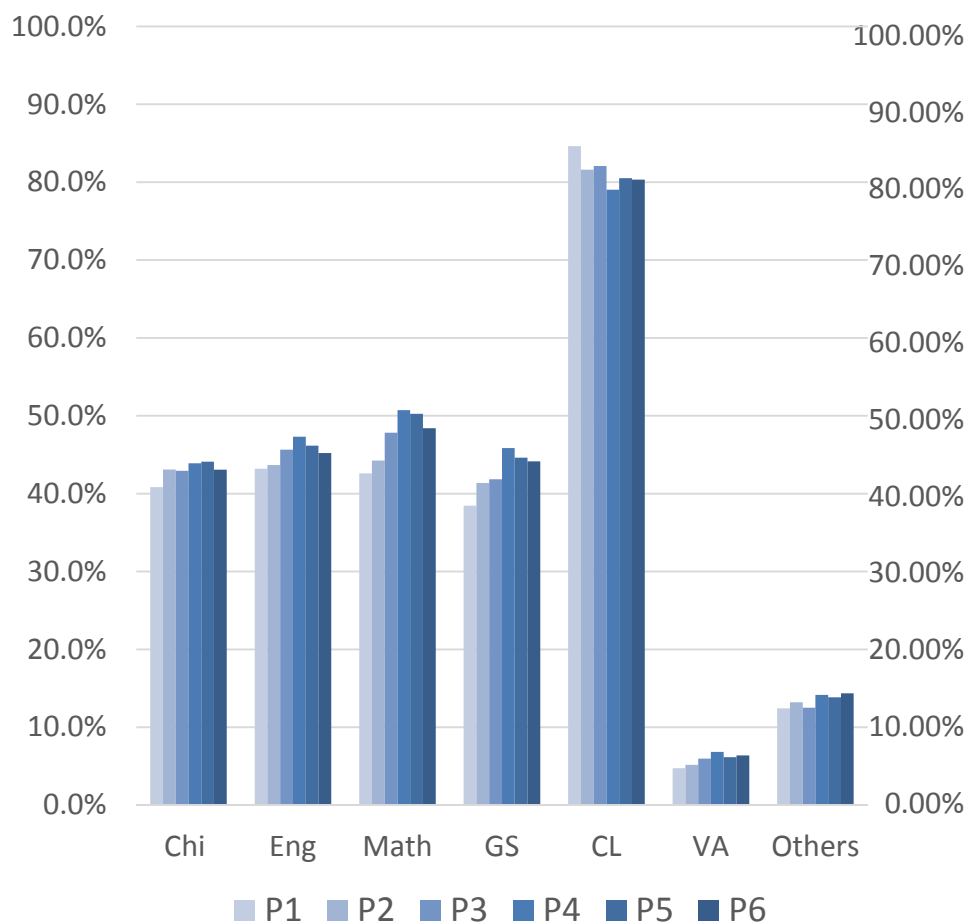
## Secondary Schools



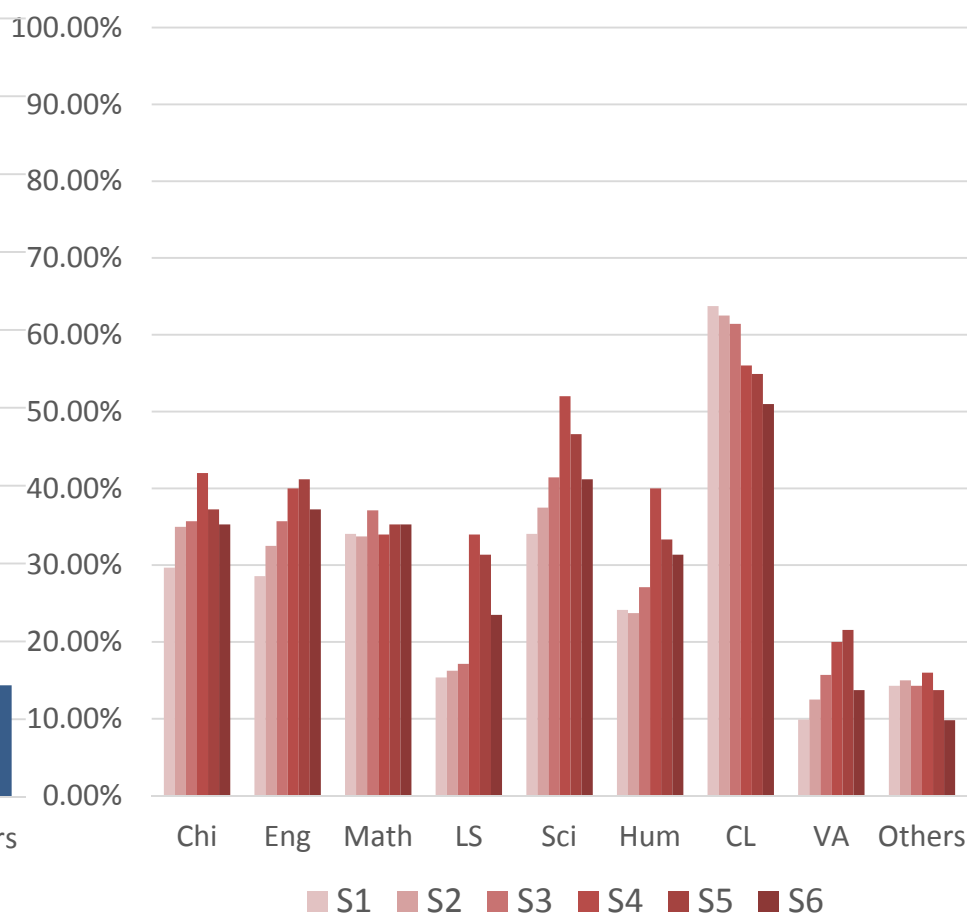
# Progress of e-textbook's adoption across KLAs/subjects

Source: School Survey on ITE (2016/17)

## Primary Schools



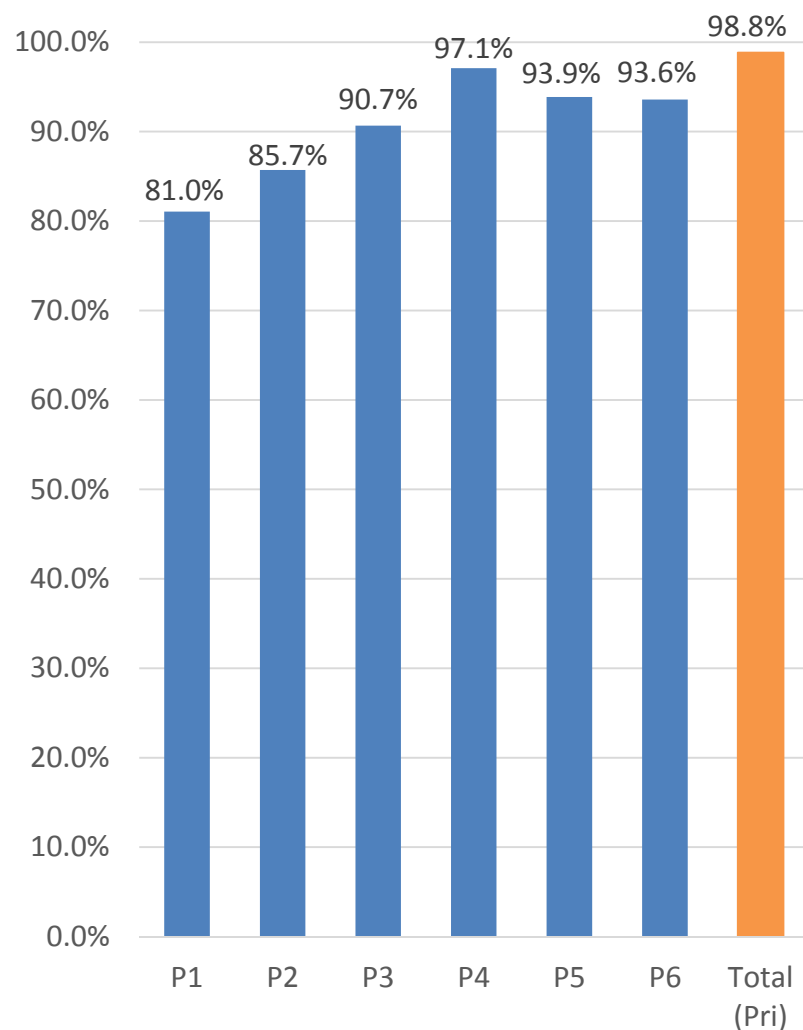
## Secondary Schools



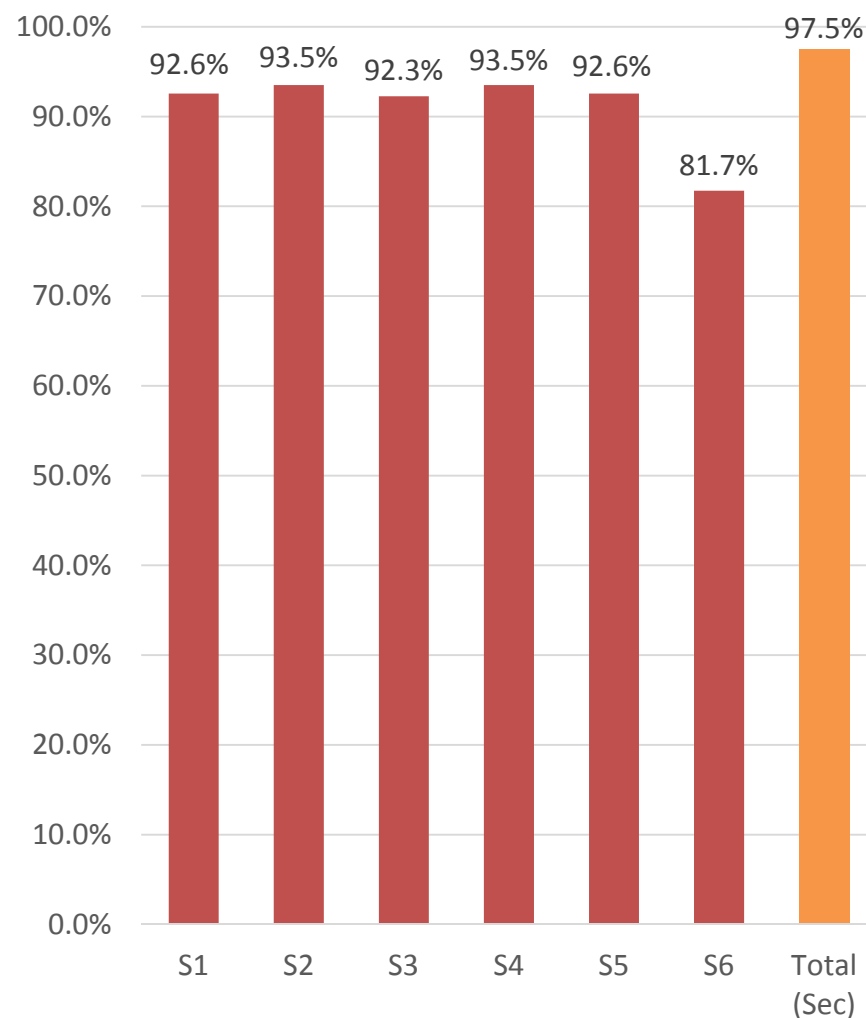
# School progress on using e-resources across education levels

Source: School Survey on ITE (2016/17)

## Primary Schools



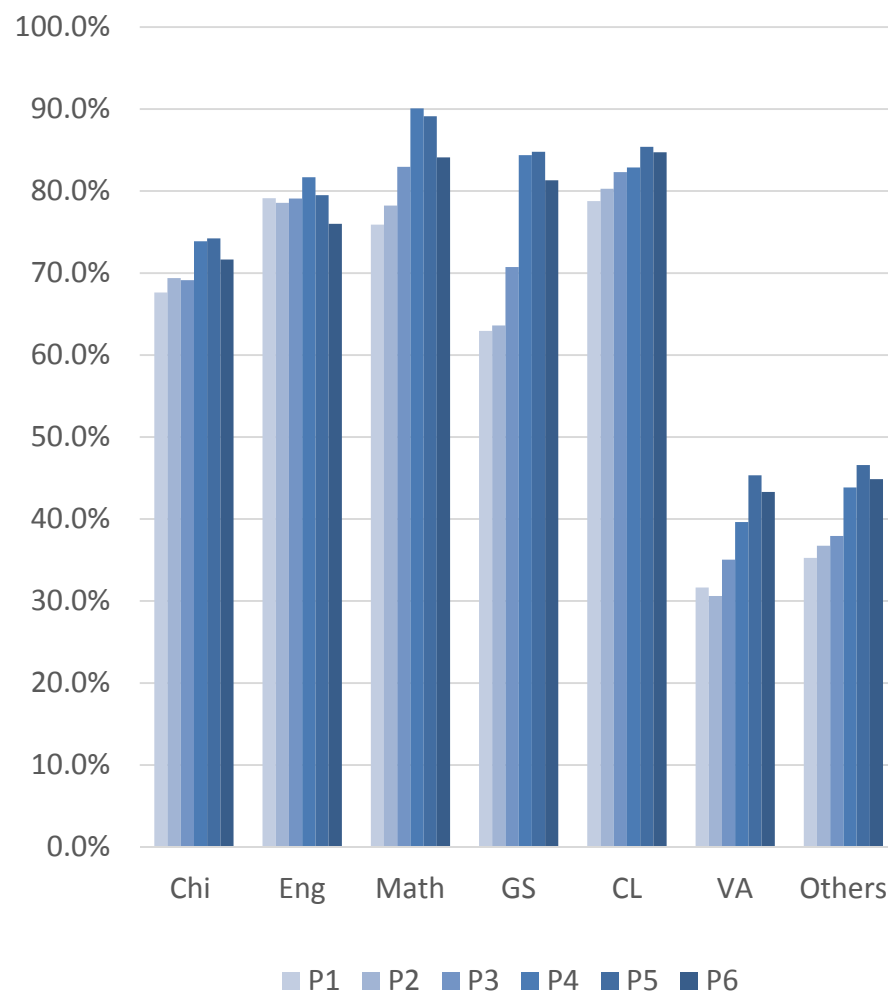
## Secondary Schools



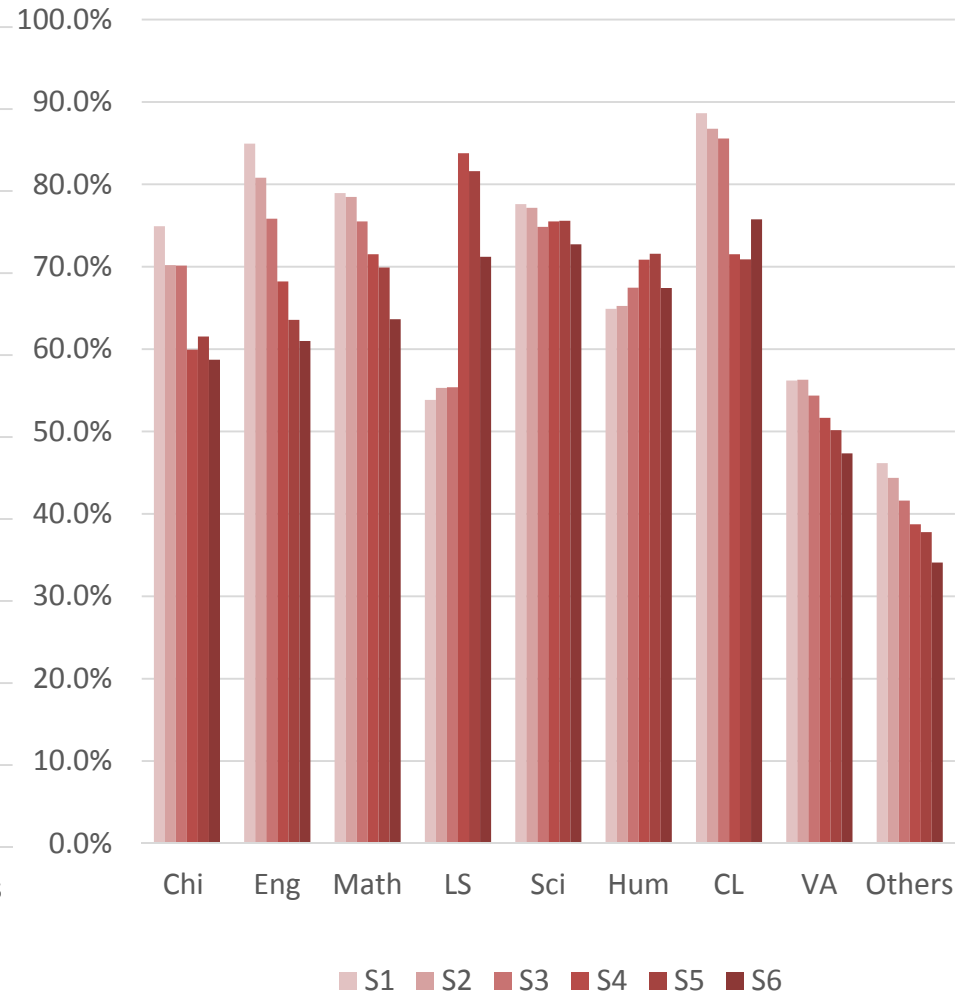
# School progress on using e-resources across subjects

Source: School Survey on ITE (2016/17)

## Primary Schools

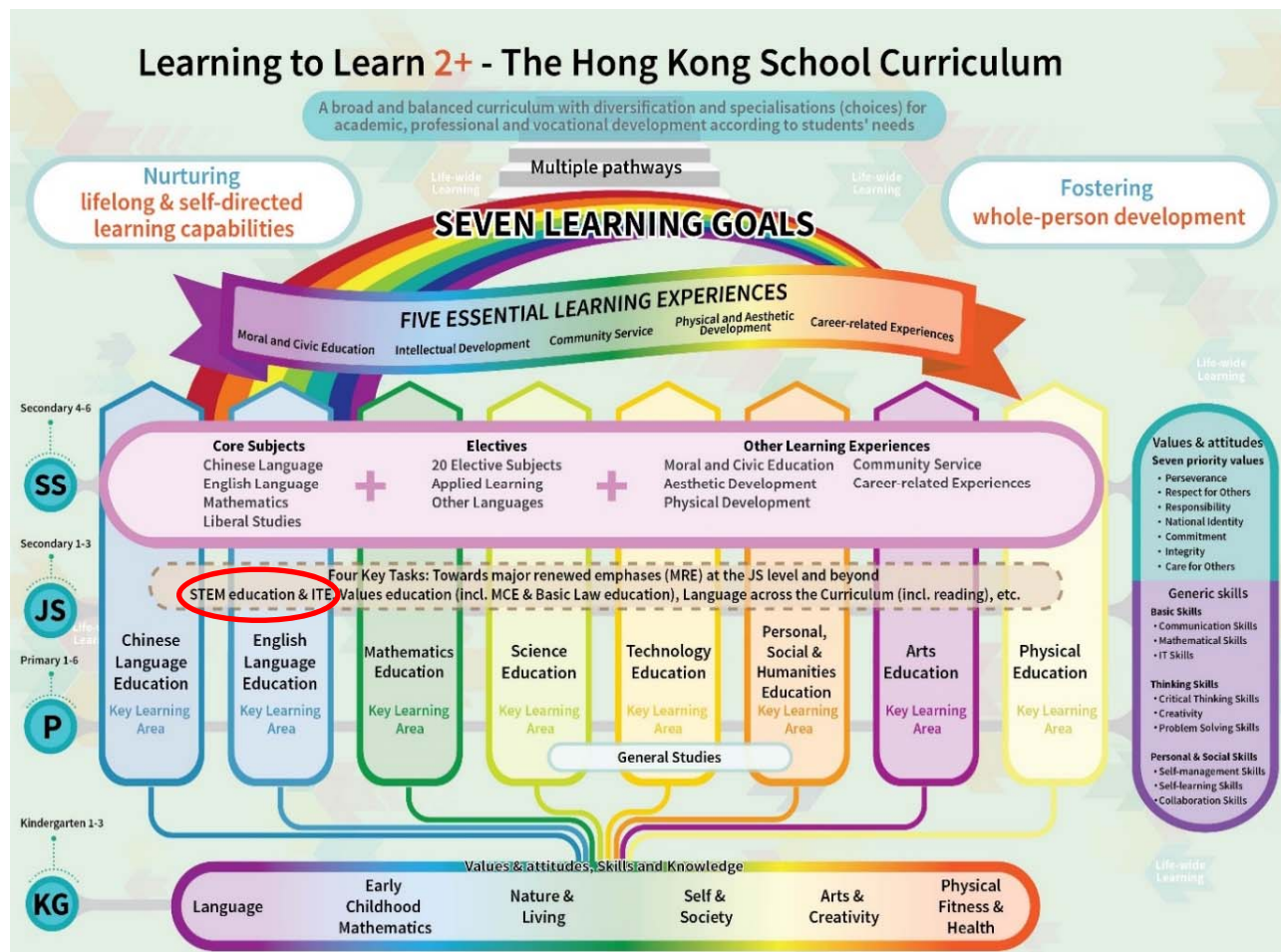


## Secondary Schools



# Action 3: Curriculum and Pedagogies

- On going curriculum review. The Secondary Education Curriculum Guide, with **ITE** as one of the major renewed emphases.



- A curriculum supplement “Coding Education: Supplement to Primary Curriculum” is prepared.
- The “*Information Literacy for Hong Kong Students*” was updated in 2016.

# Curriculum Documents

- Chapter 3D IT for Interactive Learning,  
Basic Education Curriculum Guide (P1-P4)  
2014
- Booklet 6D IT for Interactive Learning:  
Towards Self-directed Learning,  
Senior Education Curriculum Guide (Draft -  
May 2017)

<http://cd.edb.gov.hk>

# Using IT to Nurture 6Cs

*Innovative Pedagogy*

Learning outcomes -> Pedagogies -> Technology

How does the technology enhance students' learning?

## Character

- Ethical use of information and IT
- Be responsible when creating webpage contents
- Discuss issues related to cyber ethics, e.g. cyber etiquette, plagiarism, cyber scam and crime



# Citizenship

Exchange with students in other countries using video conferencing tools

Collaboration

Communication

Critical Thinking

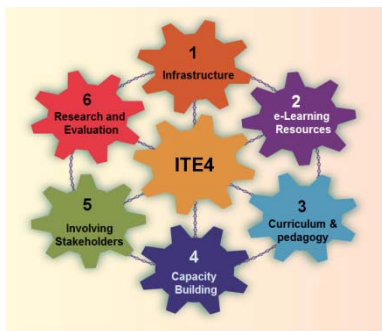
- Sharing ideas in real time
- Use collaborative IT tools / LMS to design a 5-day a trip overseas and create a presentation with rich media
- Presentation in class
- Students share their plans for peer review after class

## Creativity

聲控水機

Apply IT tools in STEM Day /  
related activities to design  
electrical home appliances for  
“Smart Living”

智能水杯



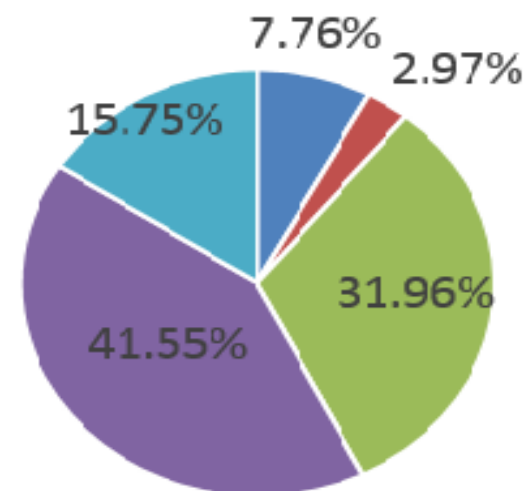
## Action 4: Capacity Building

### (A) Professional Development Programmes (PDPs)

Source: School Survey on ITE (2016/17)

School Year	No. of PDPs conducted
2014/15	311
2015/16	452
2016/17	438
2017/18 as at end of April	297

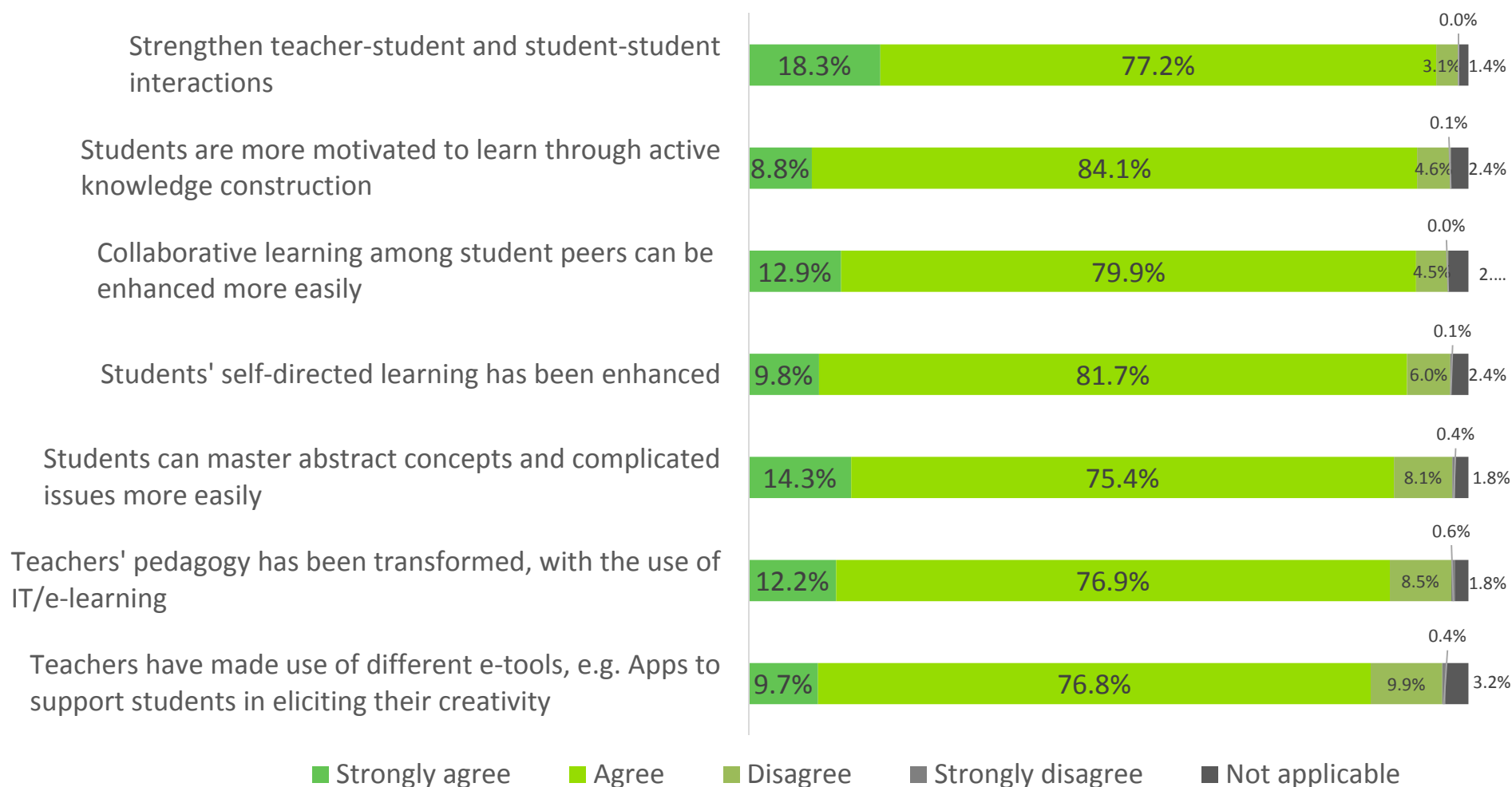
Types of PDPs organised in the 2016/17



- e-Leadership Series
- e-Safety Series
- Pedagogical Series
- Subject-related Series
- Technological Series

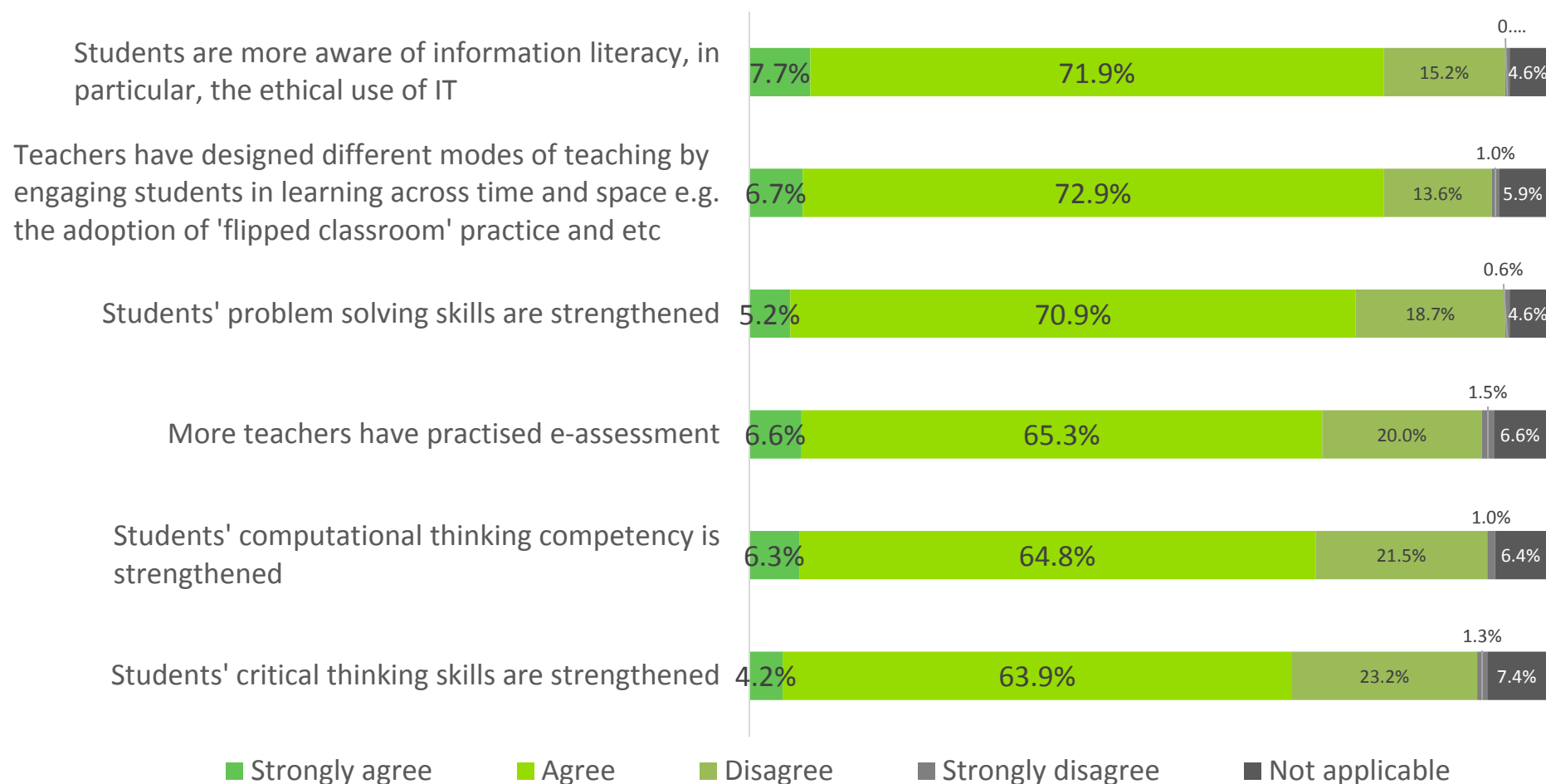
# Observations of the changes/outcomes of learning and teaching on implementing e-learning (1)

Source: School Survey on ITE (2016/17)

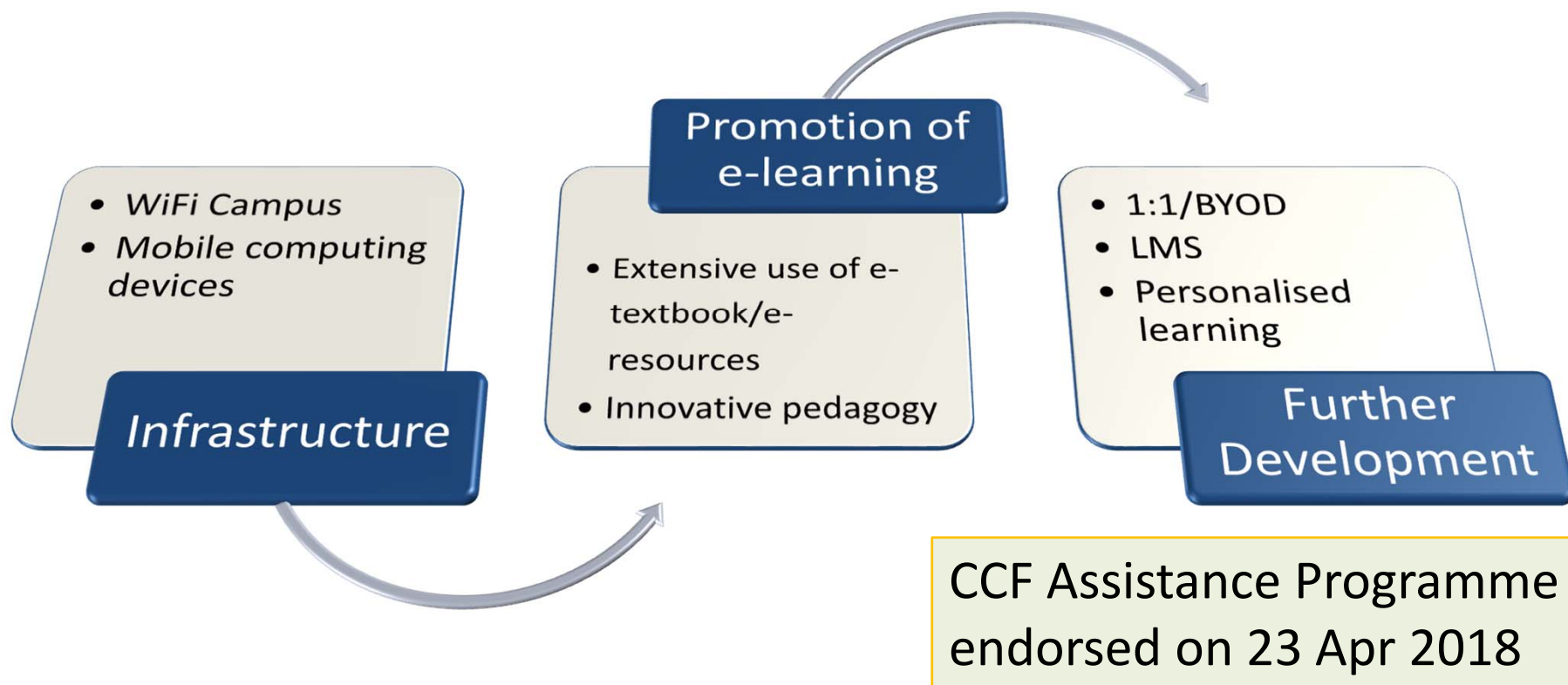


# Observations of the changes/outcomes of learning and teaching on implementing e-learning (2)

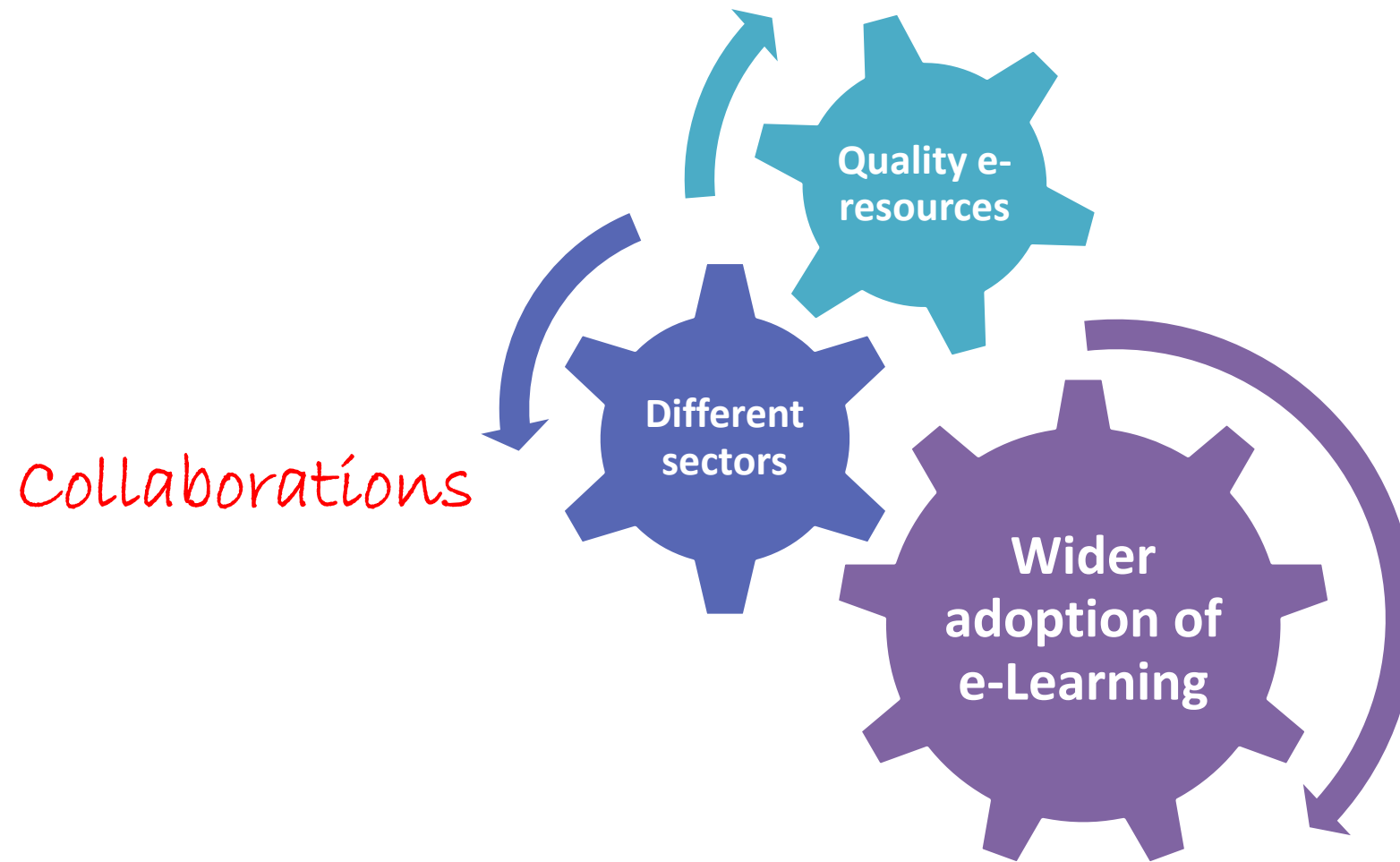
Source: School Survey on ITE (2016/17)



# Typical road map of e-learning in schools



委員會並通過一個資助清貧中小學生購買流動電腦裝置以實踐電子學習的項目。項目由二〇一八至一九學年起推行，為期三年，對象為就讀於公營中學或小學，並正領取綜合社會保障援助（綜援）、書簿津貼計劃全額資助（全津）或半額資助（半津）的學生。受惠學生就讀的學校及就讀的班別必須正推行電子學習，並建議學生自攜流動電腦裝置。首年為綜援及全津學生提供的資助金額上限為4,500元，而半津學生的資助金額上限則為2,250元。有關資助將發放予學校，由校方代學生購買裝置。預計總撥款額合共4億1,554萬元，讓約10萬2千名合資格學生受惠。





*Thank you !*

<http://www.edb.gov.hk/ited>