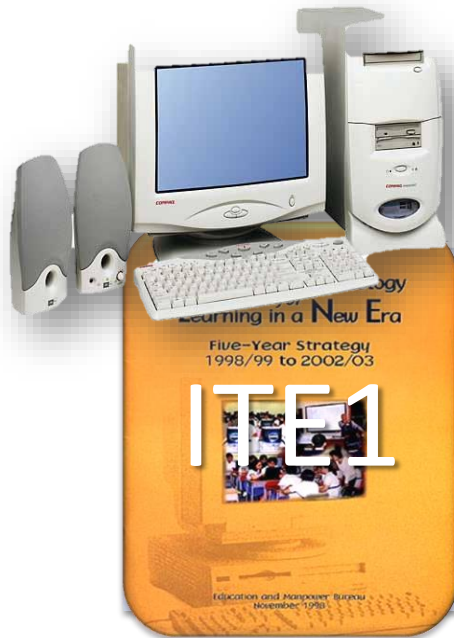


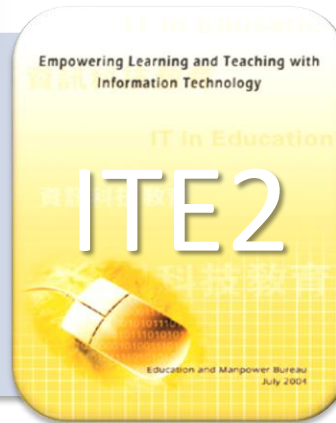
推行自攜裝置(BYOD)
以實踐電子學習

香港資訊科技教育策略

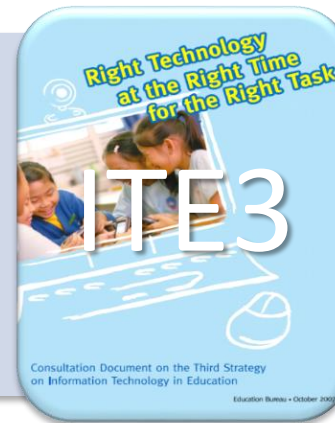
Strategies on IT in Education (ITE)



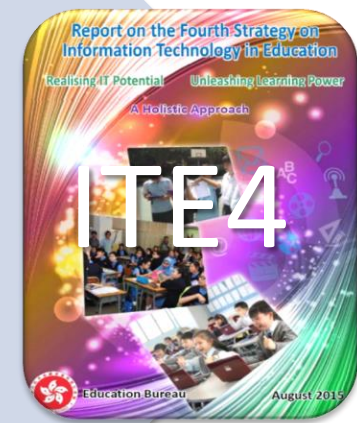
(1998-2003)



(2003-2008)



(2008-2015)



(2015-.....)



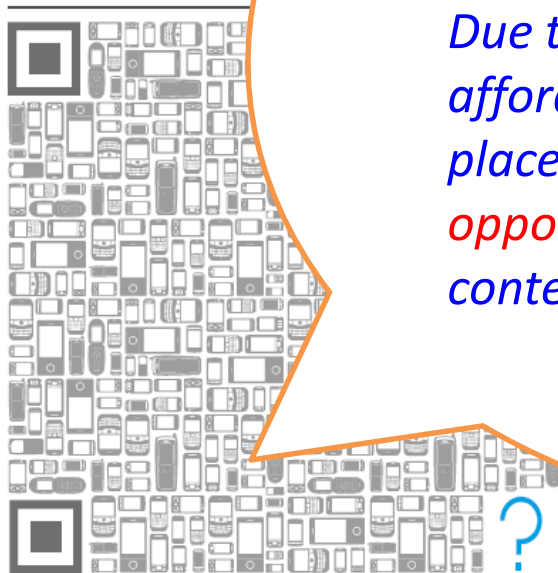
流動電腦裝置 - 電子學習的大趨勢



For the first time in history, there are more mobile phones and tablet computers on the planet than there are people.

*Due to their utility, ease-of-use and affordability, these devices are well-placed to **expand educational opportunities** for learners in diverse contexts*

UNESCO, 2013



Policy guidelines
for **mobile learning**



第四個資訊科技教育策略 (ITE4)



學校在運用流動電腦裝置進行學習的發展



學校提供裝置 或 自攜裝置？

由學校按課堂需要，提供學生流動電腦裝置進行學習活動

學生攜帶自己的流動電腦裝置回校進行學習活動



Bring Your Own Device FOR SCHOOLS

Technical advice for
school leaders and
IT administrators



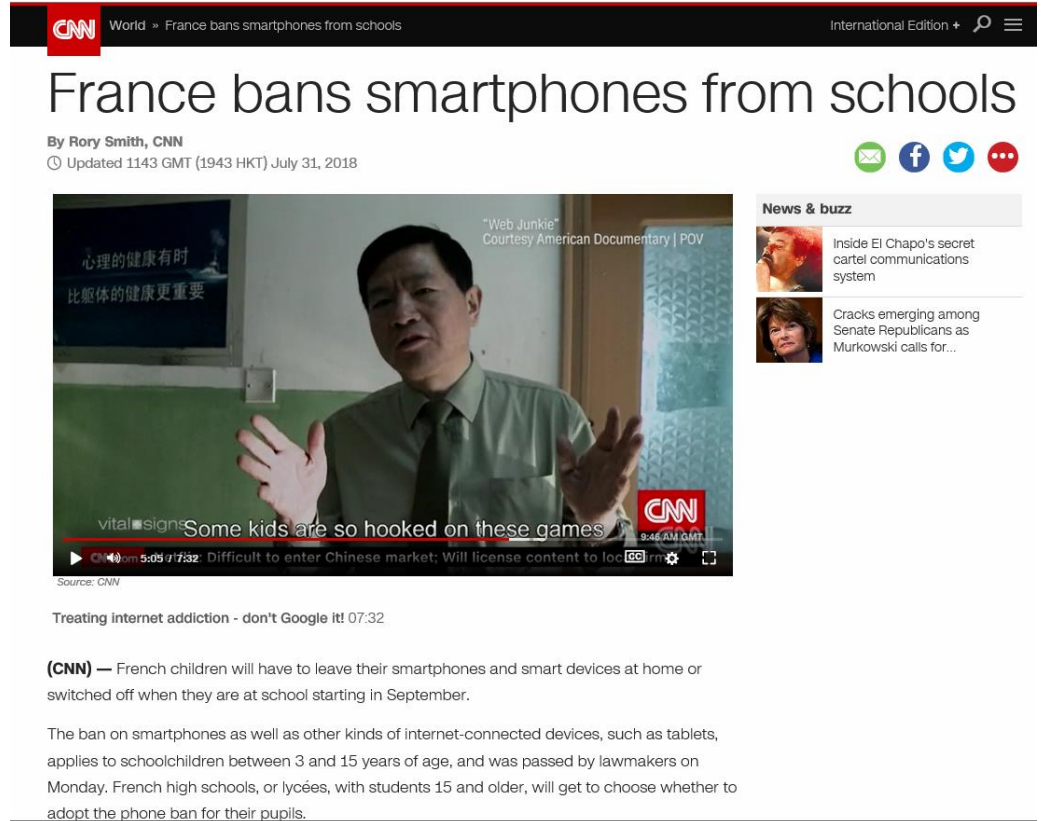
Research by European Schoolnet and its network of Ministries of Education in late 2014 found that **BYOD**, "is becoming more widespread" and schools are developing policies that allow students and teachers to connect and use their own portable equipment in *school ... in 75% of respondent schools on average, with Denmark, Portugal, Sweden, Spain, Romania and Estonia* in the lead in this respect" (Blamire & Colin, 2015).

流動電腦裝置的影響

- 2018年9月起，法國於全國學校禁止學生攜帶所有上網裝置回校，包括智能電話及平板電腦

原因

- 影響學生的專注力
- 沉迷
- 網絡欺凌



The screenshot shows a CNN news article from the International Edition. The main headline is "France bans smartphones from schools". The article is by Rory Smith, CNN, and was updated on July 31, 2018. Below the headline is a video player showing a man in a light green shirt speaking, with a subtitle that reads "Some kids are so hooked on these games". To the right of the video player is a "News & buzz" section with two articles: "Inside El Chapo's secret cartel communications system" and "Cracks emerging among Senate Republicans as Murkowski calls for...".

World » France bans smartphones from schools International Edition +

France bans smartphones from schools

By Rory Smith, CNN
Updated 1143 GMT (1943 HKT) July 31, 2018

"Web Junkie"
Courtesy American Documentary | POV

vital signs: Some kids are so hooked on these games

Source: CNN

Treating internet addiction - don't Google it! 07:32

(CNN) — French children will have to leave their smartphones and smart devices at home or switched off when they are at school starting in September.

The ban on smartphones as well as other kinds of internet-connected devices, such as tablets, applies to schoolchildren between 3 and 15 years of age, and was passed by lawmakers on Monday. French high schools, or lycées, with students 15 and older, will get to choose whether to adopt the phone ban for their pupils.

推行電子學的再思

- 使用資訊科技是學生重要的廿一世紀技能
- 發展學生的自主和協助學習能力
- 要配合學校課程規劃和教學安排（包括資訊素養）

不能擋的趨勢，
不應擋的改變。


小心計劃，
認真推行。



The image shows a screenshot of an ABC News article. The page header includes the ABC NEWS logo and navigation links for Just In, Politics, World, Business, Sport, Science, Health, Arts, and Analysis. Below the header are social media sharing options for Print, Email, Facebook, Twitter, and More. The article is categorized as 'ANALYSIS' and titled 'Smartphone ban in schools: good or bad idea?'. The author is 'The Conversation' and it was posted on 28 Jun 2018 at 10:42am. The main image shows the back of a person's head with curly hair, looking towards a fence with pink flowers. A pink cloud-shaped callout box is overlaid on the image with the text '小心計劃，認真推行。'. Below the image, there is a snippet of text: 'NSW Minister for Education, Stoker has ordered a review of smartphone use in schools. He said the review would look at the risks and rewards of social media. The review'. To the right of this snippet are two 'RELATED STORY' links: 'Dumbphones for kids? Smartphone ban an option in NSW schools' and 'How to better manage your smartphone addiction'.

「自攜裝置」的優勢

- 減省在課堂進行電子學習的相關預備工作。
- 學生使用自己的流動電腦裝置，有助學生於課堂內外與朋輩進行協作學習。
- 學生熟悉自己的裝置，能有效地在學習中使用它。
- 可配合學校的學習管理系統(LMS)，讓老師更易掌握學生的學習情況。



自攜裝置讓學習
更個人化和
具流動性

學校電子學習發展的重要元素

推行BYOD以促進
自主學習 和
個人化學習



基建及 工具

- 無線網絡
- 流動電腦裝置/
電子學習資源/
工具

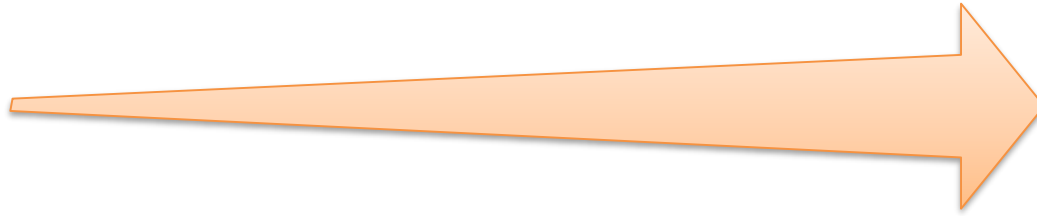
教學規 劃

- 電子教學規劃
- 教師專業發展
- 學生資訊素養

持分者

- 家長教育
- 學生輔導
- 為低收入家庭提
供支援

三種「自攜裝置」模式



靈活性
家長容易接受

模式一

- 規定品牌/型號

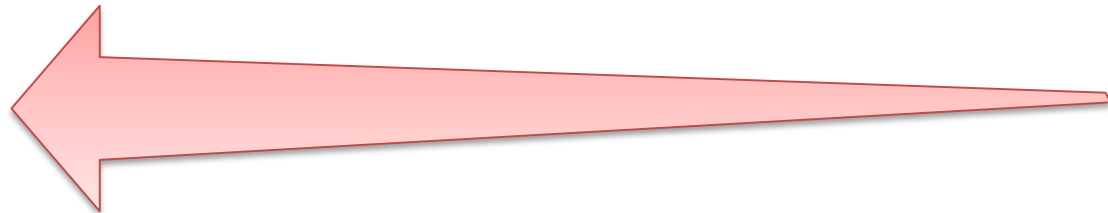
模式二

- 規定技術規格

模式三

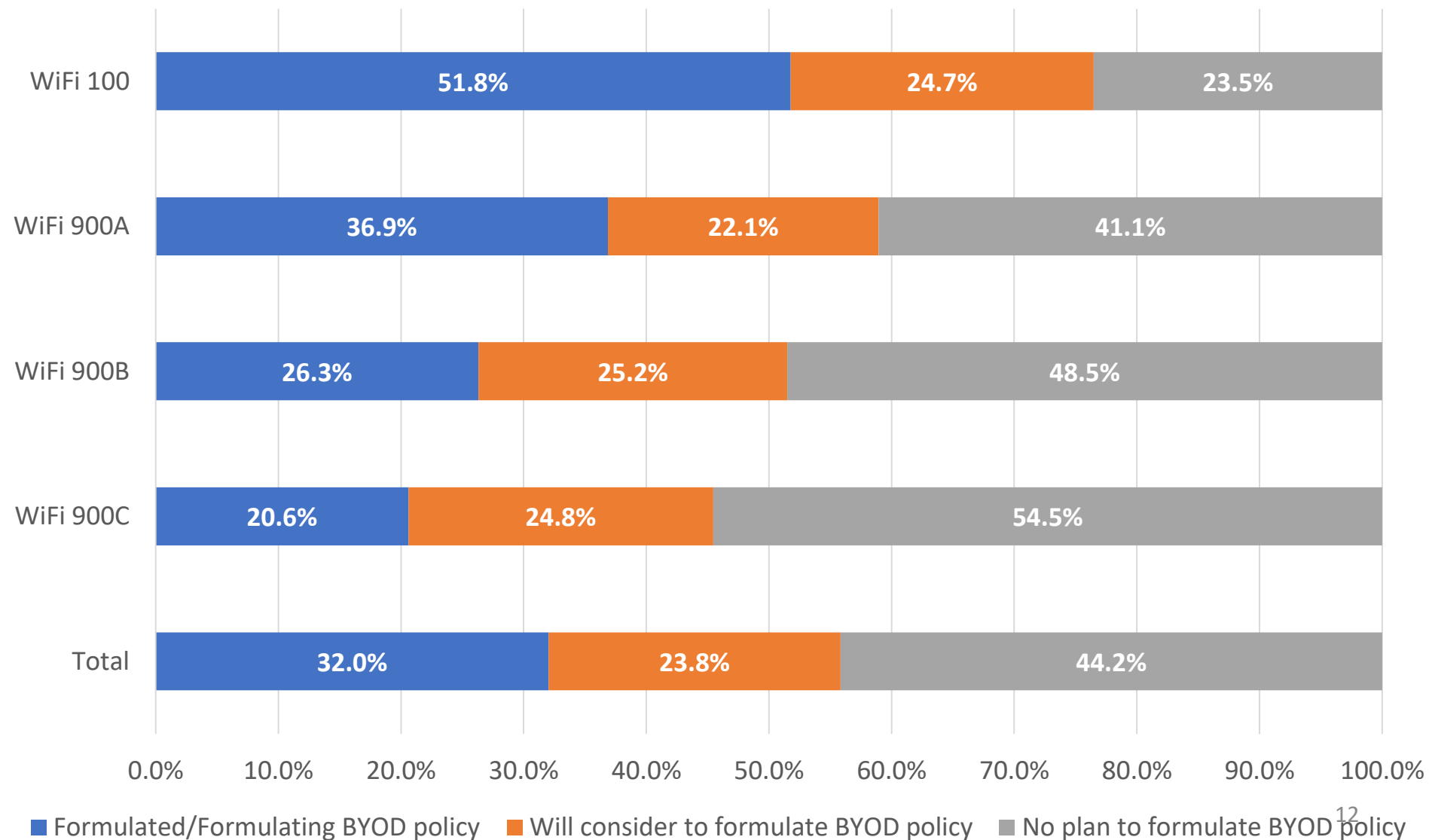
- 無特別規定

兼容性
方便管理
較多的學習資源
較易的技術支援



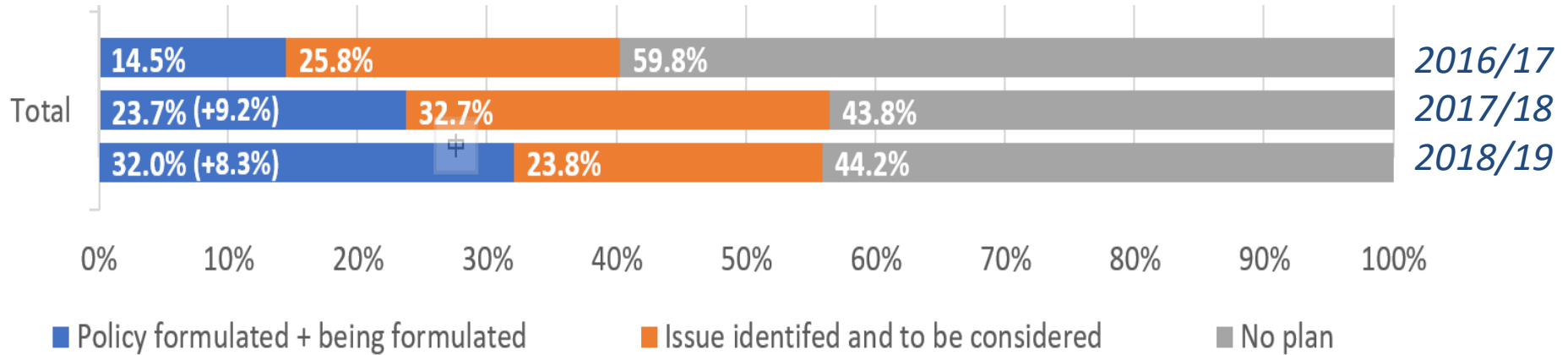
學校推行自攜裝置的情況

(ITE Survey 2018/19 – returns from 874 schools)

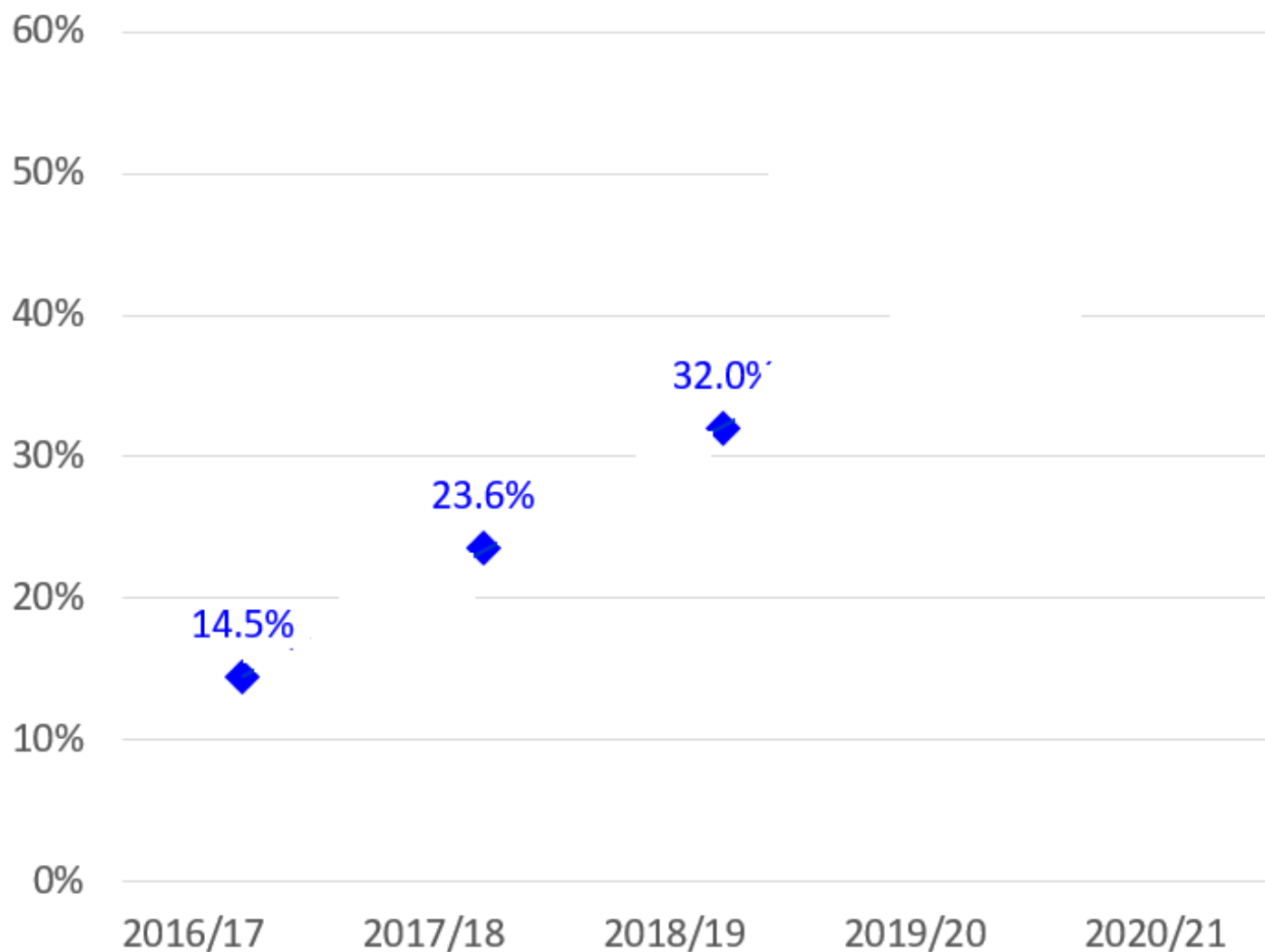


學校推行自攜裝置的情況

(2016/17 至 2018/19)

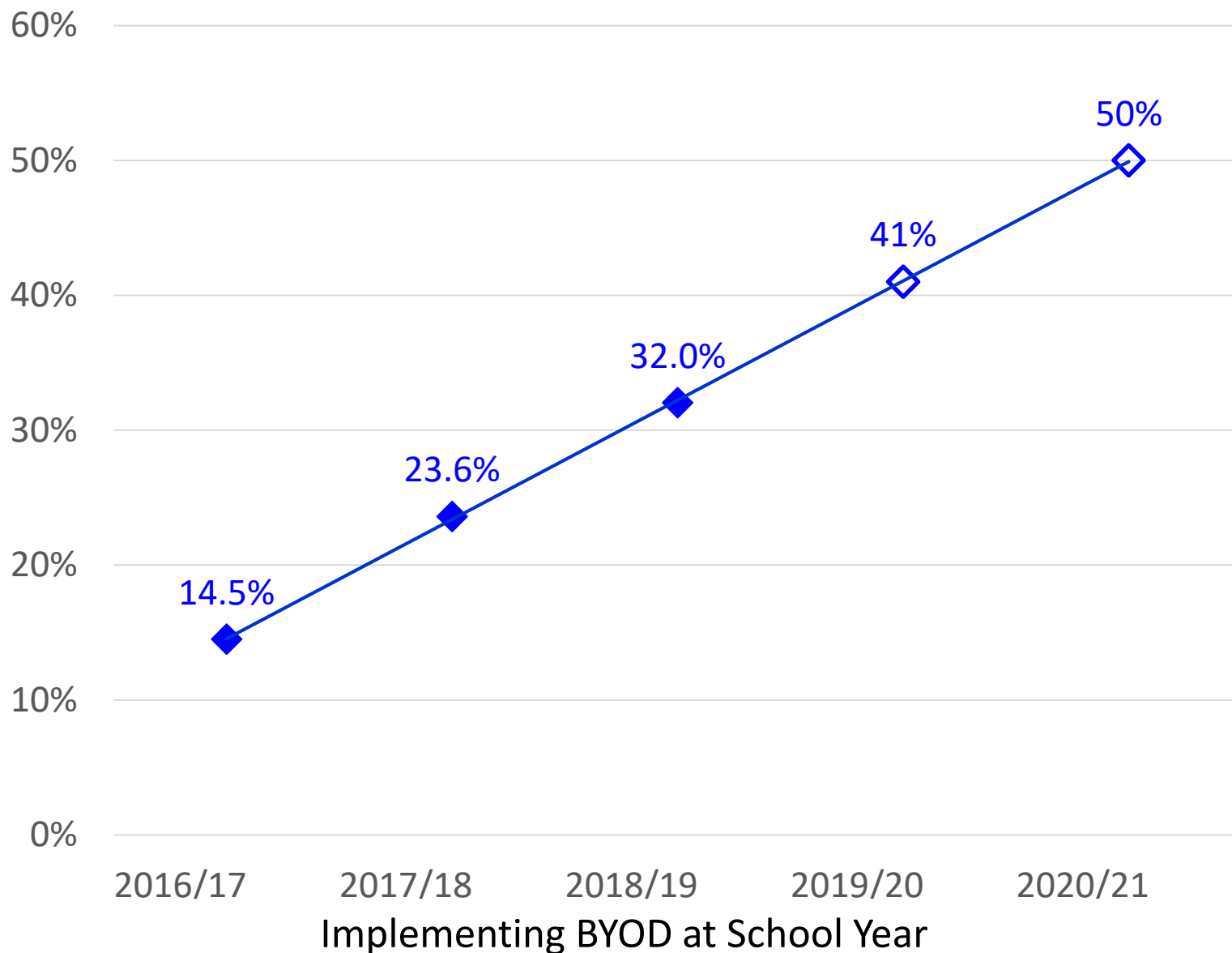


預計於2020/21學年推行自攜裝置學校的比例



Implementing BYOD at School Year

預計於2020/21學年推行自攜裝置學校的比例



教育局對學校推行「自攜裝置」的支援

- 「自攜裝置」的參考網頁

<https://www.edb.gov.hk/ited/byod>

- 教師專業培訓及到校支援服務

- 研討會：在小/中學規劃及推行「自攜裝置」以實踐電子學習

- 工作坊：策略性推行校本「自攜裝置」政策

- 資訊科技教育卓越中心校本支援服務

- 技術支援小組，為學校解答有關查詢（☎ 3698 4148）

- 關愛基金援助項目



The screenshot shows the Education Bureau website with the following content:

- Header: 香港特別行政區政府 教育局
- Navigation: GovHK 香港政府一站通, 簡體版, ENGLISH, 流動 / 無障礙瀏覽版本, 我的自訂色彩, AAA, 輸入查詢字串, 網頁指南
- Left Menu: 主頁, 最新消息, 有關教育局, 新聞公報, 教育制度及政策, 課程發展, 學生及家長相關, 教師相關, 學校行政及管理, 公共及行政相關, 公開資料, 聯絡我們
- Main Content: 在中小學推行「自攜裝置」
 - 1. 前言: 教育局於2015/16 學年起推行「第四個資訊科技教育策略」，讓學校透過資訊科技提升學與教的效能、加強課堂互動、提升學生的自主學習、解難、協作等能力。其中主要措施是為全港公營學校建立無線網絡校園，以便學生在課堂上使用流動電腦裝置進行電子學習，所有相關工程已於2017/18 學年大致完成。
學校對推行電子學習反應正面，亦試驗不同的策略，從而發揮善用流動電腦裝置於學與教的優勢。現時已有不少學校推行學生「自攜裝置」政策，讓學生攜帶私人的流動電腦裝置回校進行學習活動，使學習更趨個人化和具流動性。
 - 2. 「自攜裝置」的優勢

關愛基金援助項目

EDBCM 71/2018
(2018/19)

檔號：EDB(EID/ITE)/IT/PRO/247/4
教育局通函第71/2018號

分發名單：各官立、資助（包括特殊學校）、
按額津貼及直接資助計劃學校
校長

副本送：各組主管一備考

**關愛基金援助項目一
資助清貧中小學生購買流動電腦裝置
以實踐電子學習
（援助項目）**

摘要

本通函旨在通知學校有關上述項目的詳情及邀請擬於2018/19學年推行「自攜裝置」政策以實踐電子學習的學校參與援助項目。

背景

2. 教育局2015/16學年起推行「第四個資訊科技教育策略」，透過善用資訊科技，提升教學效能。其中主要措施是分階段為全港公營學校建立高速網絡校園，以便學生在課堂上使用流動電腦裝置進行電子學習。所有相關工程將於2017/18學年內大致完成。學校對推行電子學習反應正面，亦善用流動電腦裝置於學與教上。部分學校開始推行學生「自攜裝置」政策，以進一步發揮使用流動電腦裝置進行學習的優勢。鑑於「自攜裝置」的發展有可能為低收入家庭的學生增加經濟壓力，因此關愛基金於2018/19學年起推行援助項目，為期三年，資助這些學生購買流動電腦裝置以實踐電子學習。

詳情

3. 由於學校推行電子學習的階段不同，並且有自己的政策和時間表推行「自攜裝置」，因此學校可由2018/19學年開始的三年實施期內的任何一年參與援助項目。

EDBCM 65/2019
(2019/20)

檔號：EDB(EID/ITE)/IT/PRO/189
教育局通函第65/2019號

分發名單：各官立、資助（包括特殊學校）、
按額津貼及直接資助計劃學校
校長

副本送：各組主管一備考

**關愛基金援助項目一
資助清貧中小學生購買流動電腦裝置
以實踐電子學習（援助項目）（2019/20學年）**

摘要

本通函旨在通知學校有關上述項目的詳情及邀請擬於2019/20學年推行「自攜裝置」政策以實踐電子學習的學校參與援助項目。

背景

2. 教育局透過「第四個資訊科技教育策略」鼓勵學校使用流動電腦裝置促進電子學習。學校推行「自攜裝置」的情況漸趨普及，讓學生可攜帶私人流動電腦裝置回校進行學習，使學習更趨個人化和具流動性。鑑於「自攜裝置」的發展有可能為低收入家庭的學生增加經濟壓力，因此關愛基金於2018/19學年起推行援助項目，為期三年，資助這些學生購買流動電腦裝置以實踐電子學習。

3. 電子學習是一種開放且富有彈性的學習模式，學校可按本身的情況、電子學習需要、教師專業判斷及家長意願來決定推行「自攜裝置」的模式和步伐。學校可於實施期內的任何一年參與援助項目。教育局已透過教育通函第71/2018號邀請於2018/19學年推行「自攜裝置」的學校參與這項項目。此通函亦邀請於2019/20學年推行「自攜裝置」以實踐電子學習的學校參與這項項目。

- 項目於2018/19學年起推行，為期三年，資助清貧學生購買流動電腦裝置以配合學校推行「自攜裝置」實踐電子學習。
- 教育局會每年邀請推行BYOD的學校參加。學校應按本身的情況、電子學習需要、教師專業判斷及家長意願來決定是否推行「自攜裝置」政策及相關的時間表，並按學生需要參與這項項目。

項目概覽

- 教育局會向學校發放資助，由學校代學生購買流動電腦裝置、裝置管理系統、其他基本配件及三年產品保養。
- 綜援及全津學生獲得全額資助（2019/20學年上限為**4,610**元）；半津學生獲得半額資助（上限則為**2,305**元）；資助上限每年會按綜合消費物價指數調整。
- 三年推行期內，每名受惠學生只可接受資助一次，電腦裝置為學生個人擁有，離校時不需交還。
- 學生升學或轉校時，如果新校採用的裝置卻與舊校的不同，有關學生則可再獲資助購買另一部裝置，但須將原有裝置交回舊校。

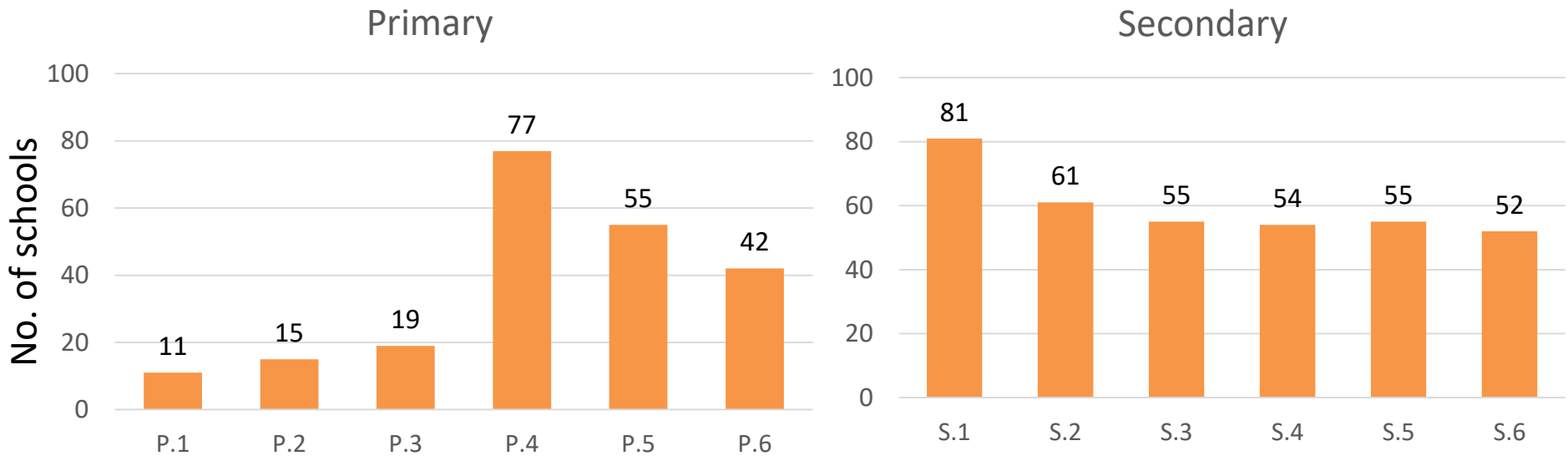


Mobile Device
Management System



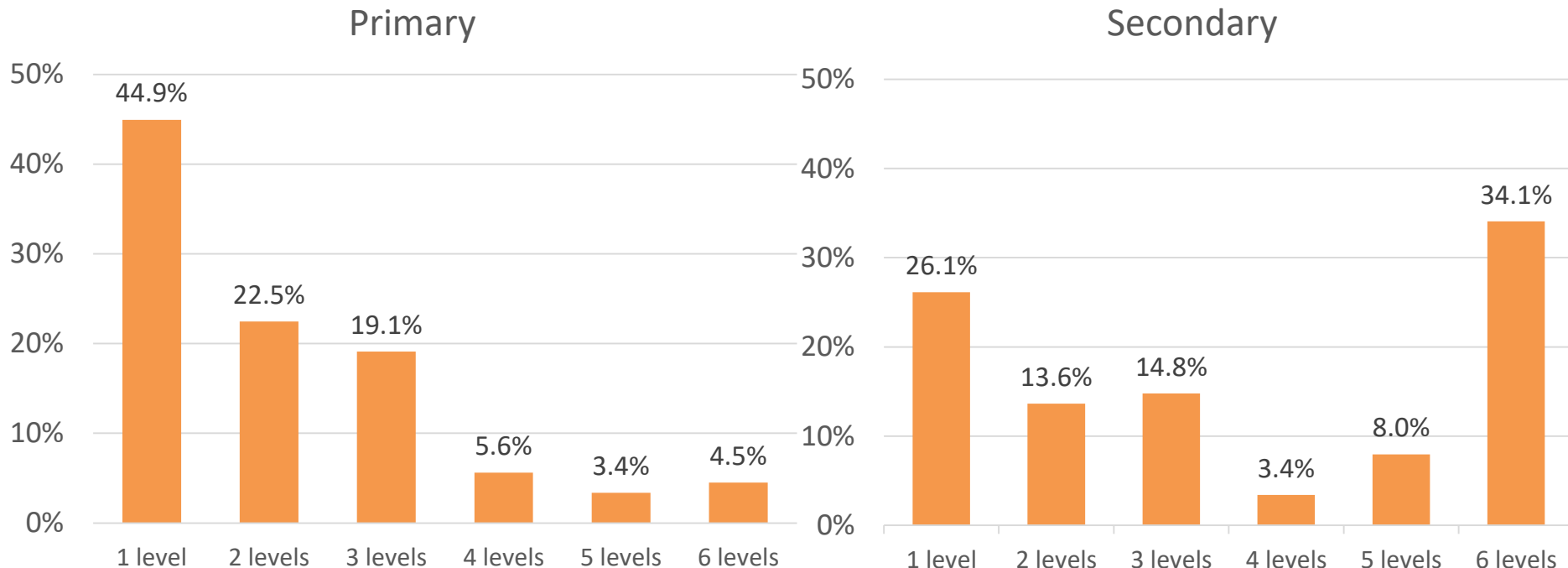
學校首年參與情況

- 於 2018/19 學年合共 **188 間學校** 參與這項計劃
 - 小學 89 間*
 - 中學 88 間*
 - 特殊學校 11 間



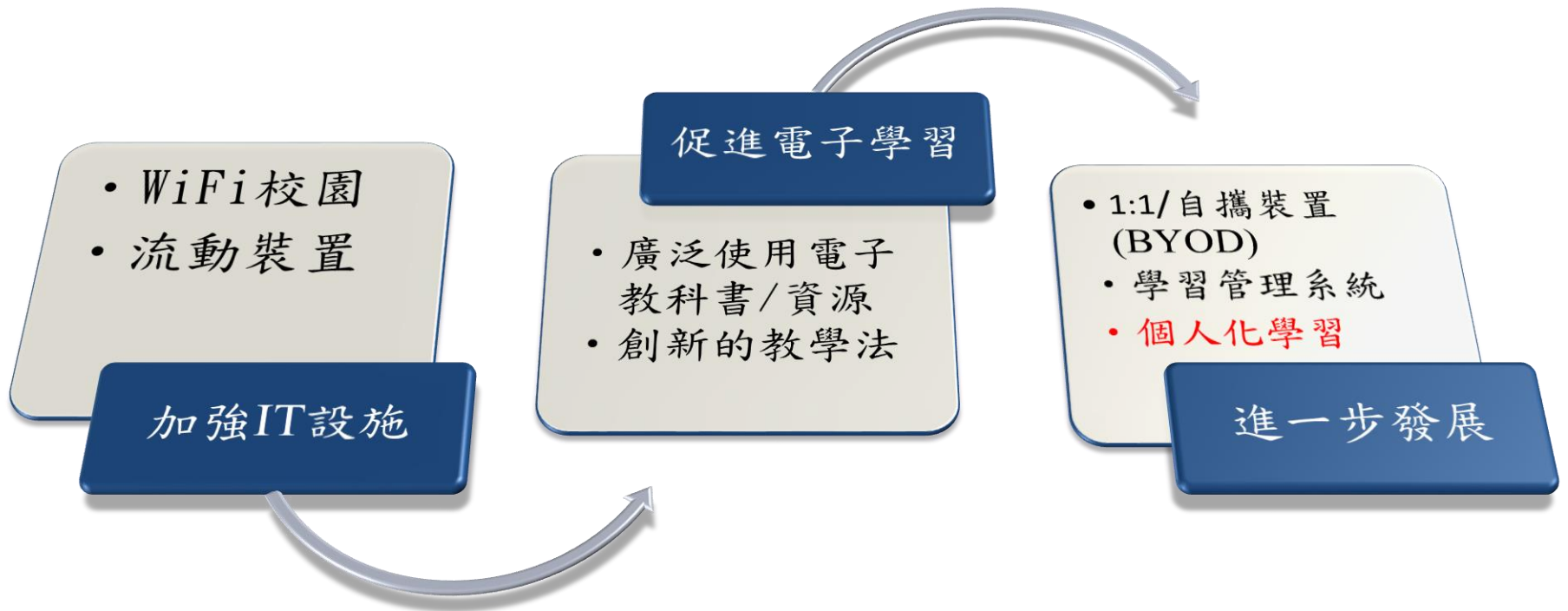
學校推行「自攜裝置」

- 學校推行「自攜裝置」的年級數目統計 (不包括特殊學校)



No. of levels with BYOD

運用流動電腦裝置進行學習



個人化學習的四大元素

Source: Gates Foundation's "Working Definition" of Personalised Learning

A WORKING DEFINITION OF PERSONALIZED LEARNING

Personalized learning seeks to support student learning by tailoring the learning environment—what, where, when, and how students learn—to address each student's needs, skills and interests. Students can take ownership of their learning, while also developing personal connections with their teachers and other adults.

GETTING STARTED

This is a working definition of personalized learning that is intended as a tool to help educators design student-centered instructional models. These attributes and tactics were developed from the practices of a number of leading schools. They are grouped together to offer a comprehensive view of the possible. No one school fully employs each of these today. Start where you want and progress from there.



學生學習
歷程記錄

學生能力
為本的學
習進程

個人化的
學習途徑

靈活的學
習環境

LEARNER PROFILES
Each student has an up-to-date record of his/her individual strengths, needs, motivations and goals.

COMPETENCY BASED PROGRESSION
Each student's progress toward clearly-defined goals is regularly assessed. A student advances and earns credit when he/she demonstrates mastery.

FLEXIBLE LEARNING ENVIRONMENTS
Student needs drive the design of the learning environment. All operational elements—staffing plans, space utilization and time allocation—respond and adapt to support students in achieving their goals.

INFORMATION & FEEDBACK
In what ways and how frequently might we provide timely, actionable information and feedback to each student? How might we also provide that information to their teachers and families?

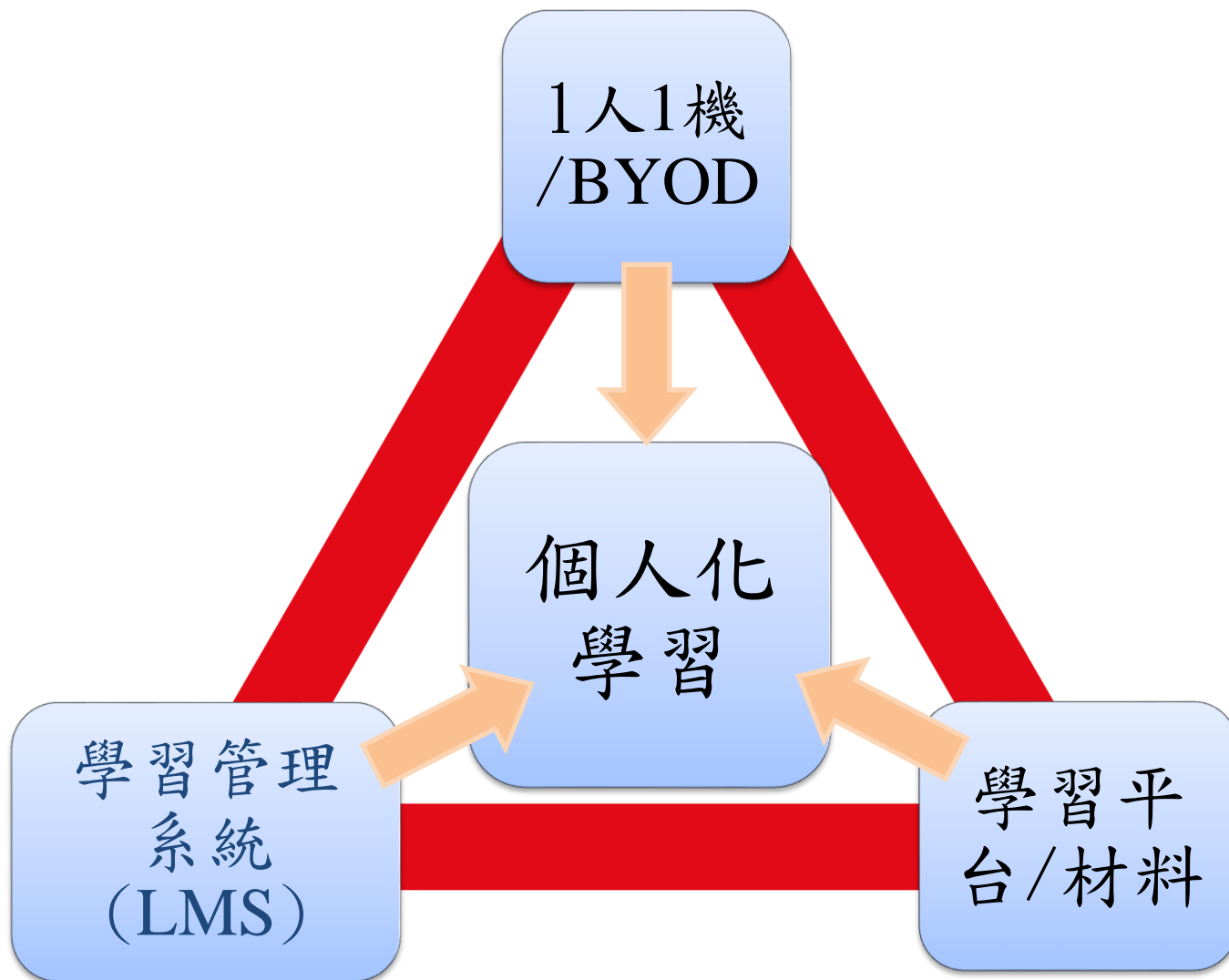
PERSONAL LEARNING PATHS
All students are held to clear, high expectations, but each student follows a customized path that is tailored to his/her individual strengths, needs, motivations and goals.

OPERATIONAL ALIGNMENT
How might we deliver all of the learning experiences that our students need, with the resources we have available? How might we build flexibility into our design to enable us to respond and adapt to changing student needs?

STAFFING & ROLES
How might we design our staffing and roles to support the varied learning experiences we hope to offer? How might the way we group students respond and adapt to their changing needs?

GROUPING & CONNECTIONS
How might we design our grouping to enable the varied learning experiences we hope to offer? How might the way we group students respond and adapt to their changing needs? In what ways might we facilitate personal connections between students, and between students and adults?

發展個人化學習



謝謝！