

Promotion and Support on Information Security in Schools by EDB

**Mr PW YAN
IT in Education Section
Education Bureau
2 June 2018**

Promotion and Support on Information Security in Schools by EDB

- Information Security in Schools webpage
- Email Message on IT Security Alert
- Information Security in Schools – Recommended Practice
- Co-organise with professional bodies to provide IT security related seminars
- Promote IT security related events / activities through school circular memorandum
- Information Literacy for Hong Kong Students
- Grants

Information Security in Schools webpage



Education Bureau
The Government of the Hong Kong Special Administrative Region

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Information Security in Schools

(14/05/2018) Reminder on IT Security Matter on HTTPS from IT in Education Section, EDB

Google has announced that starting with the release of Chrome 68 in July 2018, its Chrome browser will mark all HTTP sites as "not secure". Any websites if staying at HTTP will be viewed by Chrome users as not secure. In this connection, you may wish to turn your school's websites/web applications, in particular those Internet-facing, into HTTPS timely in order to avoid undesirable consequences such as worries and queries of students, parents, media and public. Google's announcement could be found at the following website:
<https://security.googleblog.com/2018/02/a-secure-web-is-here-to-stay.html>

Schools may refer to the following InfoSec website to know more about HTTPS and website security:
<https://www.infosec.gov.hk/english/promotion/>

To enable HTTPS on websites for content of the following webpage of OGCI on the regulation:
https://www.ogcio.gov.hk/en/our_work/regulation/

Schools are reminded to take necessary action patches recommended by the product vendor be encrypted when transmitted over an un-encrypted channel. For further information, schools may refer to:
<http://www.infosec.gov.hk/english/business/>

To enhance schools' awareness and understanding Series: School Websites Secure Sockets Layer held on 2 June 2018. Relevant teachers and staff:
<https://tcs.edb.gov.hk/tcs/admin/courses/pre>

(15/11/2017) Briefing Seminar on Strengthening School Information Security & Data Protection on 28 & 29 November 2017

AiTLE is working with a number of stakeholders, including HKPF, Cisco, Microsoft and EDB, to organise a seminar on strengthening school information security & data protection. Information of the seminar are as follows:

Date : 28 November 2017 (Tuesday)
Time : 9:30 am - 12:30 pm
Venue : Lecture Theatre, 4/F, West Block, Kowloon Tong Education Services Centre, 19 Suffolk Road, Kowloon Tong

Date : 29 November 2017 (Wednesday)
Time : 2:30 pm - 5:30 pm
Venue : Hall, SKH Saint Benedict's School, 11 Lam Chung Ave, Choi Hung Estate, Kowloon

Speaker's presentation slides are as follows:

- [Presentation by AiTLE](#)
- [Presentation by EDB ITE Section](#)
- [Presentation by EDB ITMD](#)
- [Presentation by Speedy Group](#)
- [Presentation by Speedy Group \(Video\)](#)
- [Presentation by Cisco 20171128](#)
- [Presentation by Cisco 20171129](#)
- [Presentation by Microsoft](#)

Remark: Presentation slides by HKPF could not be provided.

NEW TSA items for reference

School Management Committee



Email Message on IT Security Alert

Reminder on IT Security Matter on HTTPS from IT in Education Section, EDB

Wai Mei LAU

To: &EDB

Monday, May 14, 2018 02:01PM

[Show Details](#)

Dear Principal and Teachers,

Please be informed that Google has announced that starting with the release of Chrome 68 in July 2018, its Chrome browser will mark all HTTP sites as "not secure". Any websites if staying at HTTP will be viewed by Chrome users as not secure. In this connection, you may wish to turn your school's websites/web applications, in particular those Internet-facing, into HTTPS timely in order to avoid undesirable consequences such as worries and queries of students, parents, media and public. Google's announcement could be found at the following website: <https://security.googleblog.com/2018/02/a-secure-web-is-here-to-stay.html>

2. Schools may refer to the following document prepared by the Office of the Government Chief Information Officer (OGCIO) to know more about HTTPS and website security:

https://www.infosec.gov.hk/english/promotion/files/leaflet-https_en.pdf

To enable HTTPS on websites for content delivery, schools need to acquire digital certificates for servers. Reference could be made to the following website of OGCIO on the recognised certification authorities in Hong Kong:

https://www.ogcio.gov.hk/en/our_work/regulation/eto/ordinance/ca_in_hk/

3. We would like to take this opportunity to remind schools to take necessary actions to protect their information systems/websites, such as applying the latest security patches recommended by the product vendors, all classified information shall be encrypted while in storage, classified information shall be encrypted when transmitted over an un-trusted communication network (e.g. Internet), implement appropriate access controls, etc. For further information, schools may refer to OGCIO's InfoSec website at the following link:

http://www.infosec.gov.hk/english/business/other_sywa.html

4. Please inform the relevant system administrators / IT support of your school to follow up as appropriate.

5. To enhance schools' awareness and understanding on information and cyber security issues, a seminar "IT in Education e-Safety Series: School Websites Secure Sockets Layer (SSL) Protection, Security Risk and Cyber Security Seminar (EI0020180236)" will be held on 2 June 2018. Relevant teachers and technical support staff are encouraged to enroll at:

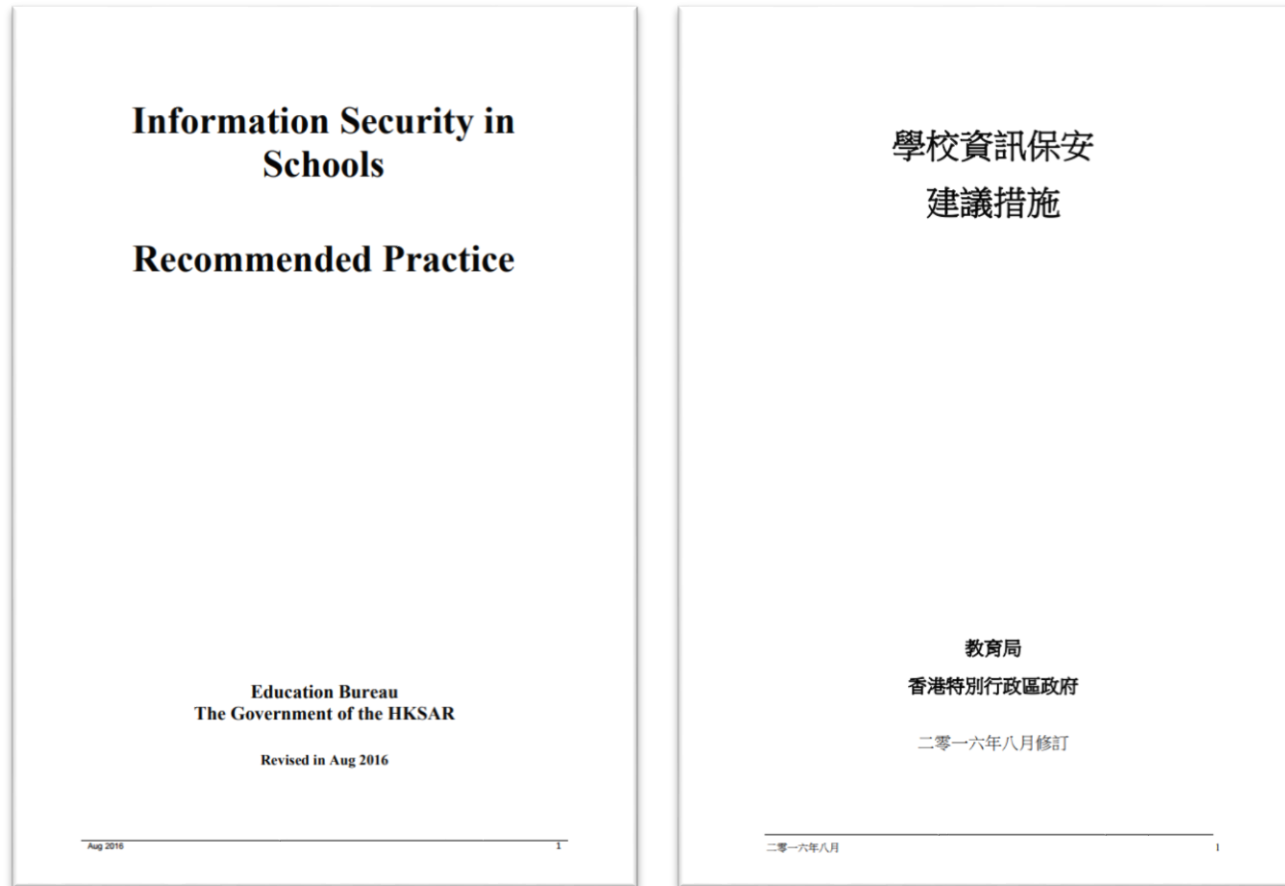
<https://tcs.edb.gov.hk/tcs/admin/courses/previewCourse/forPortal.htm?courseId=EI0020180236&lang=en>

6. For enquiries about this email, please contact the technical advisory team of Information Technology in Education Section at 3698 3594 / 3698 3577 / 3698 3566.

IT in Education Section
Education Bureau

Information Security in Schools – Recommended Practice

- Updated version is now under preparation and expected to be issued in 2018/19 school year.



Information Security in Schools – Recommended Practice

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Parts to be
updated
highlighted
in yellow

Co-organise with professional bodies to provide IT security related seminars

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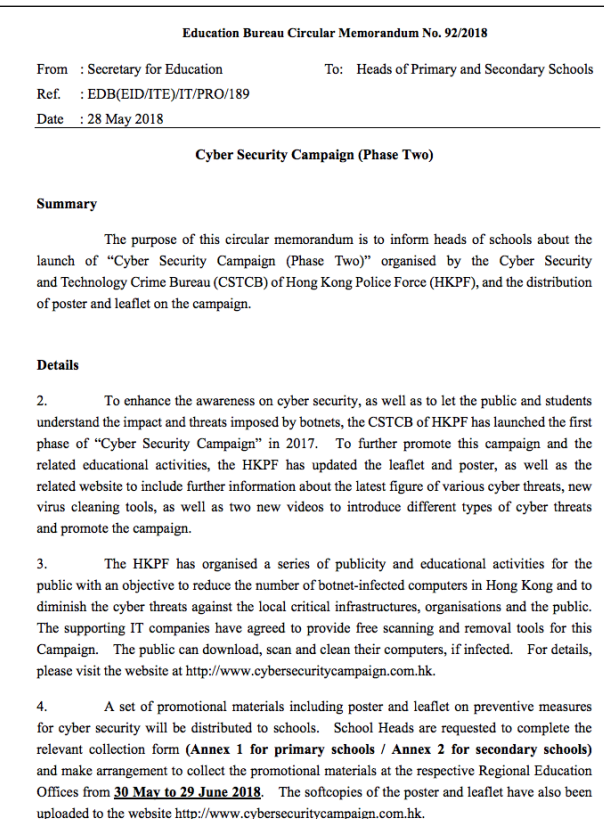
Remark: Presentation slides by HKPF could not be provided.

Promote IT security related events / activities through school circular memorandum

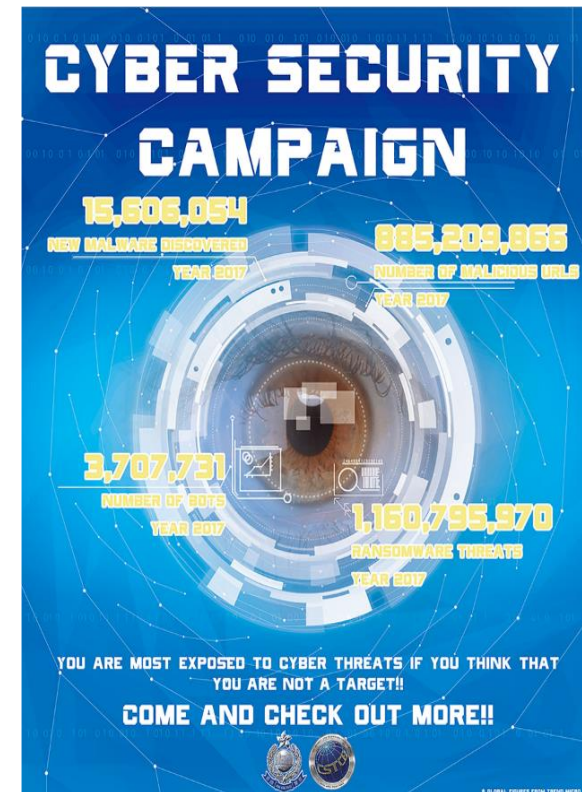
<https://www.cybersecurity.hk/en/resources.php>



EDBCM No. 92/2018 Cyber Security Campaign (Phase Two)



<https://www.cybersecuritycampaign.com.hk/>



<https://www.cybersecurity.hk/en/contest-2018.php>



Information Literacy for Hong Kong Students



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The Government of the Hong Kong Special Administrative Region



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Print

Information Literacy for Hong Kong Students

[Introduction](#) | [Related Documents](#) | [On-going Support](#) | [Related Links](#)

Introduction

Information technology (IT) is a powerful tool to unleash the learning capability of students. With the advancement of technology and its application through innovative pedagogies in all KLAs, students' capability in information literacy (IL), self-directed learning and other 21st century skills such as creativity, problem solving skills, collaboration skills and computational thinking skills are enhanced. Strategies on IT in Education are formulated at various stages to enable students to learn and excel through realising the potential of IT in enhancing interactive learning and teaching experiences.

As an important competency, IT helps students identify the need for information; locate, evaluate, extract, organise and present information; create new ideas; cope with the dynamics in our information world; use information ethically as well as refrain from immoral practices such as cyber bullying and infringing intellectual property rights. IL could be developed through the application of the generic skills (see Section 2.3.1 and Appendix 1 of this booklet) in the context of handling information in different media in our information world. This also involves various knowledge contexts and has close linkage with the KLAs.

Schools can make reference to the "Information Literacy for Hong Kong Students" for suggestions on how to develop students' knowledge, skills and attitudes to use information and information technology ethically and effectively as responsible citizens and lifelong learners. Incorporation of IL in the whole-school curriculum will provide authentic contexts for students to apply the skills and benefit their learning in relevant KLAs.



School Information

<http://www.edb.gov.hk/il/eng>

Information Literacy for Hong Kong Students



Literacy Areas 1, 4 & 8 are relevant to the information security matters

Information Literacy for Hong Kong Students

Background

Since 1998, the EDB has introduced a series of strategies on Information Technology (IT) in Education to facilitate schools' incorporation of IT in learning and teaching. In 2000, a set of IT Learning Targets, highlighting the use of IT and information, was developed to serve as a set of guidelines for schools to organise relevant learning and teaching activities. In tandem with the Learning to Learn curriculum reform which is now moving towards continual curriculum renewal, we have reviewed the implementation of the IT Learning Targets and further strengthened the role of information literacy (IL) which is essential for lifelong and self-directed learning. The IL for HK Students is thus developed to help schools understand how to develop students' knowledge, skills and attitude to use information and information technology at different key stages. *(Please refer to the Annex for details.)*

IL as a Learning Goal

Students will use information and information technology ethically and effectively as responsible citizens and lifelong learners.

Objectives

Information Literacy (IL) refers to the ability and attitude that would lead to an effective and ethical use of information. The IL for HK Students aims to develop students' abilities to:

- identify the need for information;
- locate, evaluate, extract, organise and present information;
- create new ideas;
- cope with the dynamic in our information world; and
- refrain from unethical use of information such as cyber-bullying and infringing intellectual property rights.

Relationship with Values Education/Generic Skills/Four Key Tasks/Key Learning Areas

Incorporation of IL in the school curriculum will provide authentic contexts to promote values education. While the learning and teaching effectiveness is enhanced through an IT-rich environment supported by high-quality and easy-to-use e-resources, due attention has to be given to the promotion of ethical use of information. IL can be developed in the context of handling information with different media when students are provided with learning experiences which involve the application of Generic Skills (e.g. creativity and problem solving) or the planning and implementation of the Four Key Tasks (i.e. Moral and Civic Education, Reading to Learn: Towards Reading across the Curriculum, Project Learning, and IT for Self-directed Learning) to develop learning to learn capabilities. While students apply IL in relevant Key Learning Areas/Subjects/School Library activities, they can accommodate the advances in technology to benefit their learning and simulate the practice of informed and responsible citizens.

Category	Eight Literacy Areas	
Effective and Ethical use of information for lifelong learning	1	Use, provide and communicate information ethically and responsibly
Generic IL Skills	2	Identify and define a need for information
	3	Locate and access relevant information
	4	Evaluate information and information providers, in terms of authority, credibility and current purpose
	5	Extract and organise information and create new ideas
Information World	6	Be able to apply IT skills in order to process information and produce user-generated content
	7	Recognise the roles and functions of information providers (e.g. libraries, museums, internet) in the society
	8	Recognise the conditions under which reliable information could be obtained

Overview of ITE Grants

Recurrent

CITG

\$197,929 – 680,748
(\$397,000 on average)

- IT-related consumables
- Digital resource materials
- Internet fee
- Employment/hire of TSS
- Opening for school's IT facilities
- Maintenance, upgrading and replacement of IT facilities

Funding for ITE4

\$48,530 to \$121,340
(\$70,000 on average)

- WiFi subscription
- Maintenance/ replacement of mobile devices

ITSSG

\$300,000

- Employment/hire of TSS
- Additional technical support services such as data migration and cloud management

One-off

ITE4 (\$100,000)

- Mobile device

OITG (\$200,000)

- Mobile device
- Employment/hire of additional TSS
- E-resource/platform

Sharing on useful resources

InfoSec Website



- One-stop portal for the general public to effectively access information and resources on information security as well as measures and best practices for prevention of cyber crimes.

The screenshot displays the InfoSec Website interface. At the top, there is a navigation bar with language options (English, 繁體版, 简体版), a search bar, and a text size adjustment tool. Below this is a main menu with icons for General Users, Youngsters & Students, Parents & Teachers, IT Professionals, and SME. The left sidebar contains a list of links: Home, About Us, What's New, News and Events, Promotion & Public Education, Information Security, Virus & Malicious Code, Protecting Yourself, Protecting Your Computer, Protecting Your Business, Computer Related Crime, Anti-Phishing, Technical References, Related Ordinances, Public Services, Useful Resources, and Glossary. The main content area shows the breadcrumb trail: Home > Protecting Your Business > Securing Your Web Application. The title 'Protecting Your Business' is displayed in large blue text. Below it, the section 'Securing Your Web Applications' is highlighted in orange. The text describes the importance of web application security in the current business environment. A list of links is provided for further reading: Common Vulnerabilities in Web Applications, Administrative Measures for Securing Web Applications, Technical Measures for Securing Web Applications, A Checklist for Web Applications Acceptance, Guidelines for Web Application Owners for Preventing Web Attacks, and Tips for End-users for Preventing Web Attacks. Navigation links for 'Back' and 'Top' are also present.

English 繁體版 简体版

FAQ Search : Go Change text size: A A A

General Users Youngsters & Students Parents & Teachers IT Professionals SME

Home > Protecting Your Business > Securing Your Web Application Print

Protecting Your Business

Securing Your Web Applications

Advances in web technologies coupled with a changing business environment, mean that web applications are becoming more prevalent in corporate, public and Government services today. Although web applications can provide convenience and efficiency, there are also a number of new security threats, which could potentially pose significant risks to an organisation's information technology infrastructure if not handled properly.

Today traditional network security measures and technologies may not be sufficient to safeguard web applications from new threats since attacks are now specifically targeting security flaws in the design of web applications. New security measures, both technical and administrative, need to be implemented alongside the development of web applications.

- ▶ [Common Vulnerabilities in Web Applications](#)
- ▶ [Administrative Measures for Securing Web Applications](#)
- ▶ [Technical Measures for Securing Web Applications](#)
- ▶ [A Checklist for Web Applications Acceptance](#)
- ▶ [Guidelines for Web Application Owners for Preventing Web Attacks](#)
- ▶ [Tips for End-users for Preventing Web Attacks](#)

◀ Back ▶ Top

Information Security Guide for Small Businesses - HTTPS and Website Security



The image displays the 'Information Security Guide for Small Businesses - HTTPS and Website Security' leaflet and a screenshot of the corresponding website. The leaflet features a red header with the title 'HTTPS and Website Security' and an illustration of a magnifying glass over a laptop screen showing 'Secure https://'. It includes logos for the Office of the Government Chief Information Officer, HKCERT, and the Hong Kong Police Force. The website screenshot shows a browser window with the title 'InfoSec Website' and a list of 'Points to note about HTTPS and Website Security'.

Information Security Guide for Small Businesses

HTTPS and Website Security

Office of the Government Chief Information Officer
Hong Kong Computer Emergency Response Team Coordination Centre
Hong Kong Police Force

For details, please visit the InfoSec website at:
www.infosec.gov.hk

Points to note about HTTPS and Website Security

- Use server certificate issued by a recognised certificate authority and keep the certificate in "Trusted" condition
- Employ secure protocols only (e.g. TLS 1.2)
- Automatically redirect web traffic to HTTPS site (e.g. enable HTTP Strict Transport Security (HSTS) support)
- Use strong cipher suites (e.g. SHA-256, AES 256-bit, etc.) and disable those functions with security risks (e.g. TLS compression, etc.)
- Update operating systems, applications, framework libraries and cipher suites periodically
- Store sensitive data in the backend server with proper protection
- Do not include sensitive information in the URL

https://www.cybersecurity.hk/js/pdfjs/web/viewer.html?file=/images/resources/leaflet-https_en.pdf

Secure Your Website

Be a Smart Website Owner



Secure Your Website

Be a Smart Website Owner

Wooh! Not difficult to develop a website from scratch!

Fast & Good Logistics Company

Kekeke... Discovered a web server hosting a company website with no security measures at all!

Meanwhile

Cyber Security Information Portal
www.cybersecurity.hk

Great! Not securely configured. **No firewall and intrusion detection system.**

Port Scanning

Oh... Software is **outdated** and password is **easy to guess**. Let's see if there are any sensitive data.

Latest Patch

Password
admin1234

What a boring site! Let's make a difference.

Hello! Buddies, Welcome to Fast & Good Toys Shop


Secure Your Website

Please ☒ follow the security good practices below -

- ☐ update software including operating system, web server application and security software regularly
- ☐ configure web server securely according to best practices
- ☐ assign proper access rights
- ☐ encrypt sensitive data for storage and transmission
- ☐ adopt secure remote access for website administration
- ☐ use strong authentication and password and change password regularly
- ☐ monitor and review security logs regularly
- ☐ conduct security vulnerability scanning or penetration test regularly and after major system update
- ☐ select web hosting service that meets your security requirements

WEBSITE UNDER PROTECTION


Cyber security Information Portal

 Cyber Security Information Portal

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Share Tweet

I Want to Know Hot Topics I Want to Secure My Device / Website I Want to Watch Video I Want to Join Events I Want to Hear Expert Advice I Want to Learn Good Practices I Want to Get Resources

 Keep Your Website Safe

Home > Safety Centre > Website


1 Software update 2 Data encryption 3 Remote administration 4 Authentication password 5 Alert notification 6 Search indexing 7 Security scan 8 Outsourcing

1		Update operating system, application and framework libraries	+
2		Encrypt sensitive information in web page	+
3		Adopt secure remote access solution for website administration	+
4		Adopt strong authentication and password	+
5		Enable and review event logs and alerts	+



<https://www.cybersecurity.hk/en/safety-web.php>

Cyber security Information Portal

 Cyber Security Information Portal

Eng | 繁 | 简 | A | A

Search

Share Tweet

I Want to Know
Hot Topics

I Want to Secure
My Device / Website


I Want to Watch
Video

I Want to Join
Events

I Want to Hear
Expert Advice

I Want to Learn
Good Practices


I Want to Get
Resources





Home > School Visit


School Visit

From Sep 2007 to Mar 2018, we have visited 221 schools and relayed information security message to over 66 400 participants, including students, teachers and parents.









 About Us

 Type of School Visit

 Schools Visited

 Presentation Materials

 Statistics





<https://www.cybersecurity.hk/en/school-visit.php>