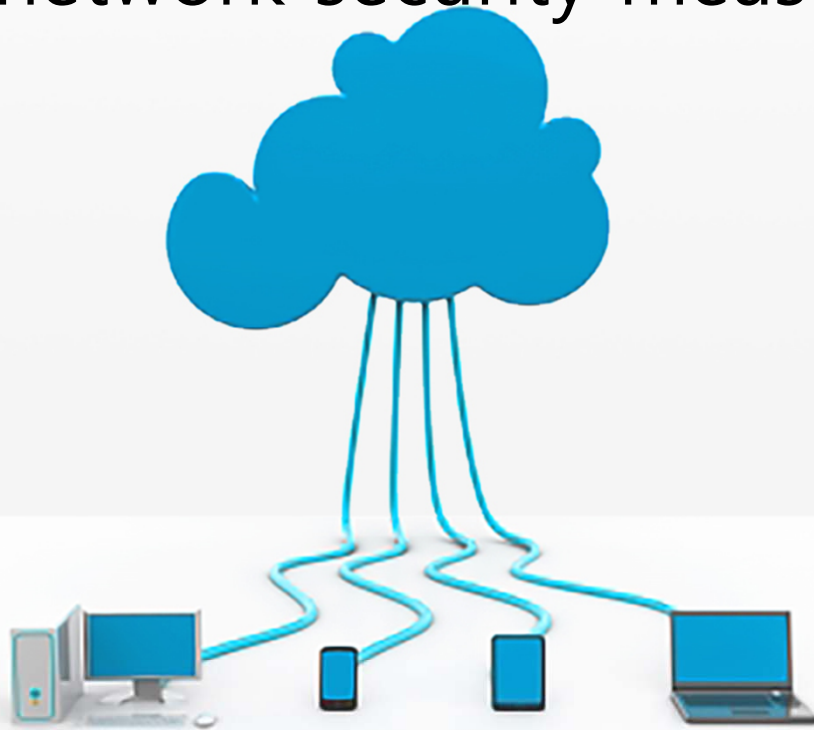
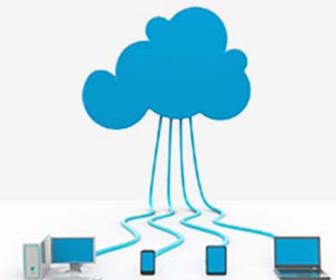


# The roles of school management and technical support staff on implementing information and network security measures



**KAM WAI MING**  
Principal of HKSKH Bishop Hall Secondary School  
Chairman of Hong Kong Association for Computer Education

# Security VS Convenience



# Students sue Miami-Dade school district after Social Security numbers posted online

BY KYRA GURNEY

[KGURNEY@MIAMIHERALD.COM](mailto:KGURNEY@MIAMIHERALD.COM)

JUNE 21, 2017 12:31 PM, UPDATED JUNE 21, 2017 12:34 PM

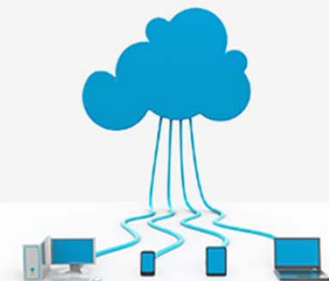


The Miami-Dade School Board has been sued by two students who say their Social Security numbers were posted on a district website.

Two former Miami-Dade students are suing the School Board after they found their Social Security numbers and test scores online along with the personal information of hundreds of other students.

The plaintiffs did a basic online search of their names and discovered that the information was posted on the Miami-Dade school district's website, according to the lawsuit.

"The carelessness with how the district manages students' private information needs to be addressed," lawyer Stephanie Langer said in a statement. The students are asking for both monetary damages and an "overhaul" of school district policies on the protection of student information.



1,446 views | May 22, 2018, 11:00am

# School Hackers Changed Grades And Tried To Get A Free Lunch



**Lee Mathews** Contributor ⓘ

Security

*Observing, pondering, and writing about tech. Generally in that order.*

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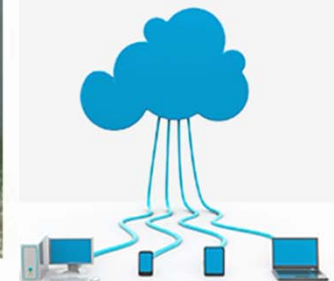
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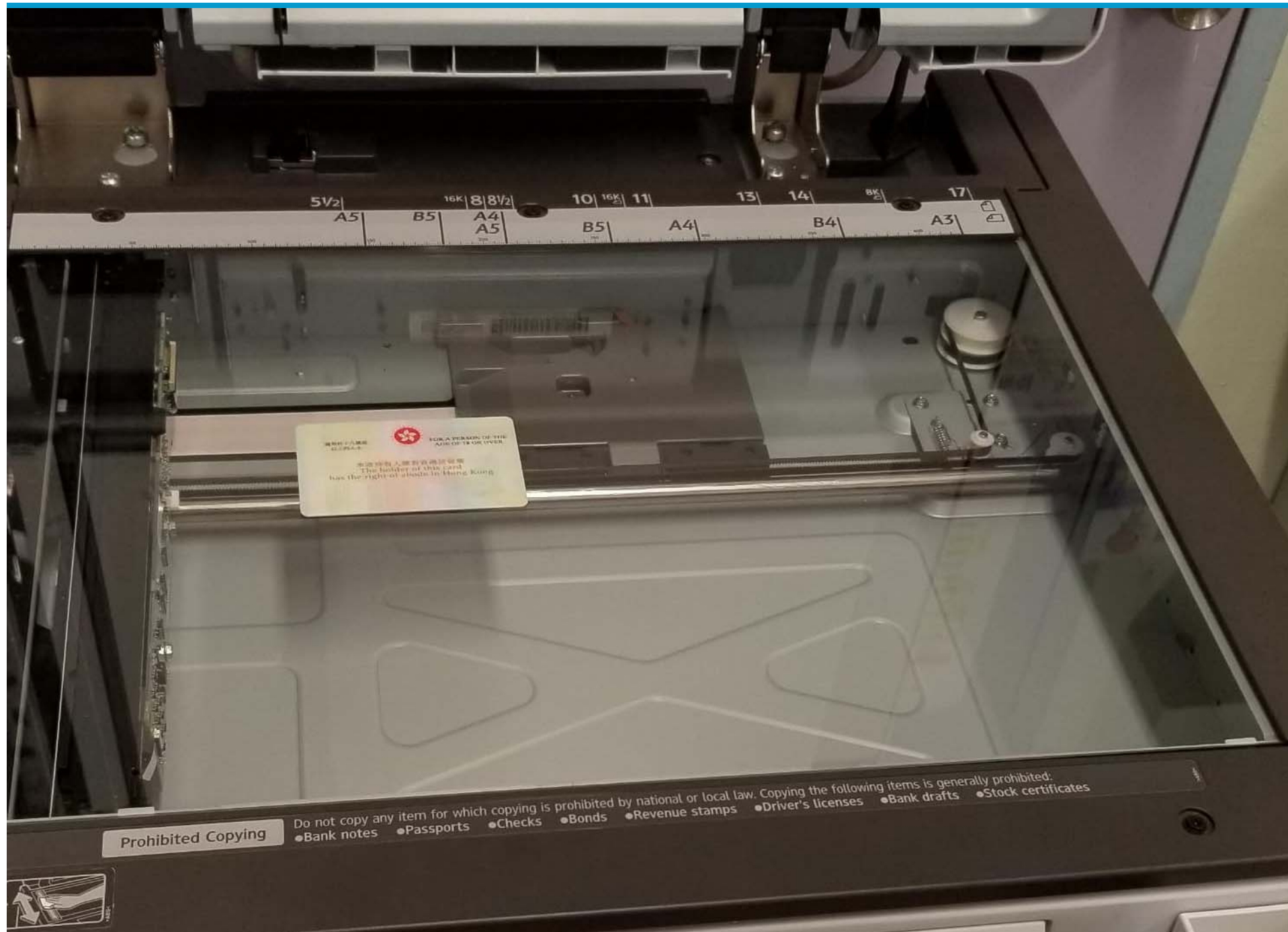
School districts around the U.S. are busy wrapping up their academic years. Some are also wrapping up other business, like criminal investigations into breaches of the school's computer systems.



Screen capture: Lee Mathews/Forbes LEE MATHEWS/FORBES

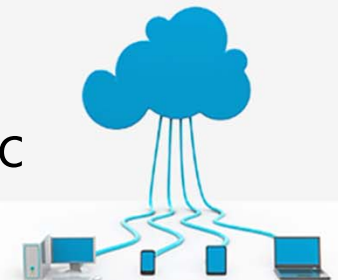






# Building a Cyber-Secure Culture

- Mindset
  - Given the prevalence of cyber attacks, we need to stay alert and prepared.
- Leadership
  - Set overall direction, establish priorities, maintain influence, and mitigate risks
  - School IT Team should model good personal security habits based on guidelines
- Training and Awareness
  - Awareness training programs build an understanding of risks and provide specific steps for mitigating them.



# Managing and Maintaining Cyber-security in School

- Policies and Procedures
- Infrastructure and Technology
- Education and Training
- Standards and Inspection



# Policies and Procedures

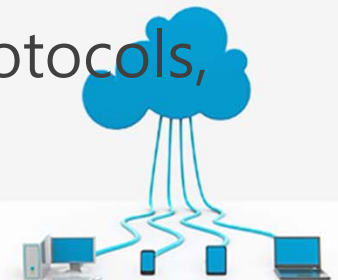
- Include cyber risks in the school risk management process
- Nominate right person responsible for cyber security issues
- Systematic and regular review of cyber security policies, at least on an annual basis
- Ensure policies and procedures that incorporate cyber security concerns are in place
- Establish a routine reporting process for cyber risks within the school \_
- Maintenance, Monitoring, and Analysis of audit logs
- Record cyber security incidents and actions taken



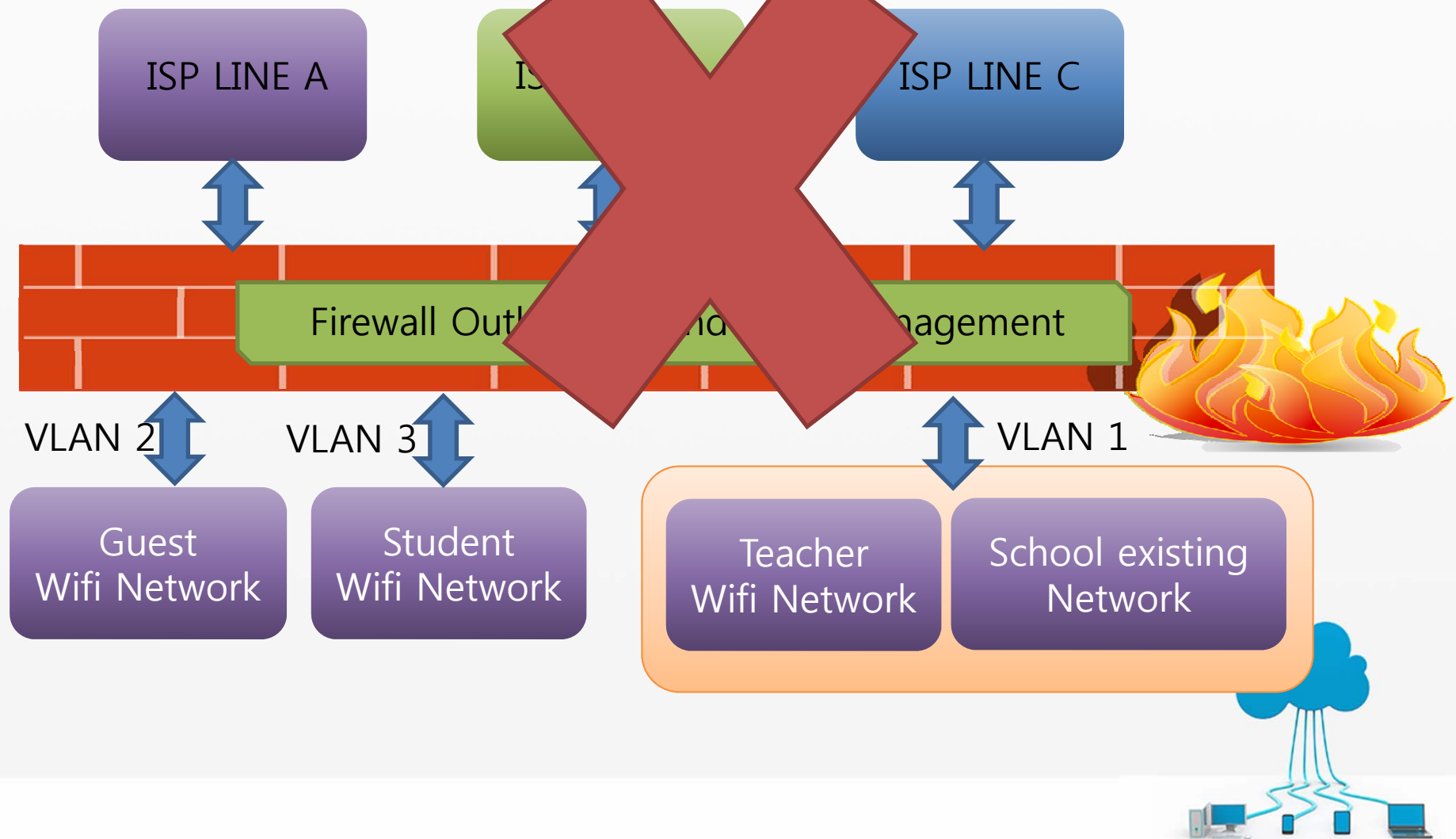


# Infrastructure and Technology

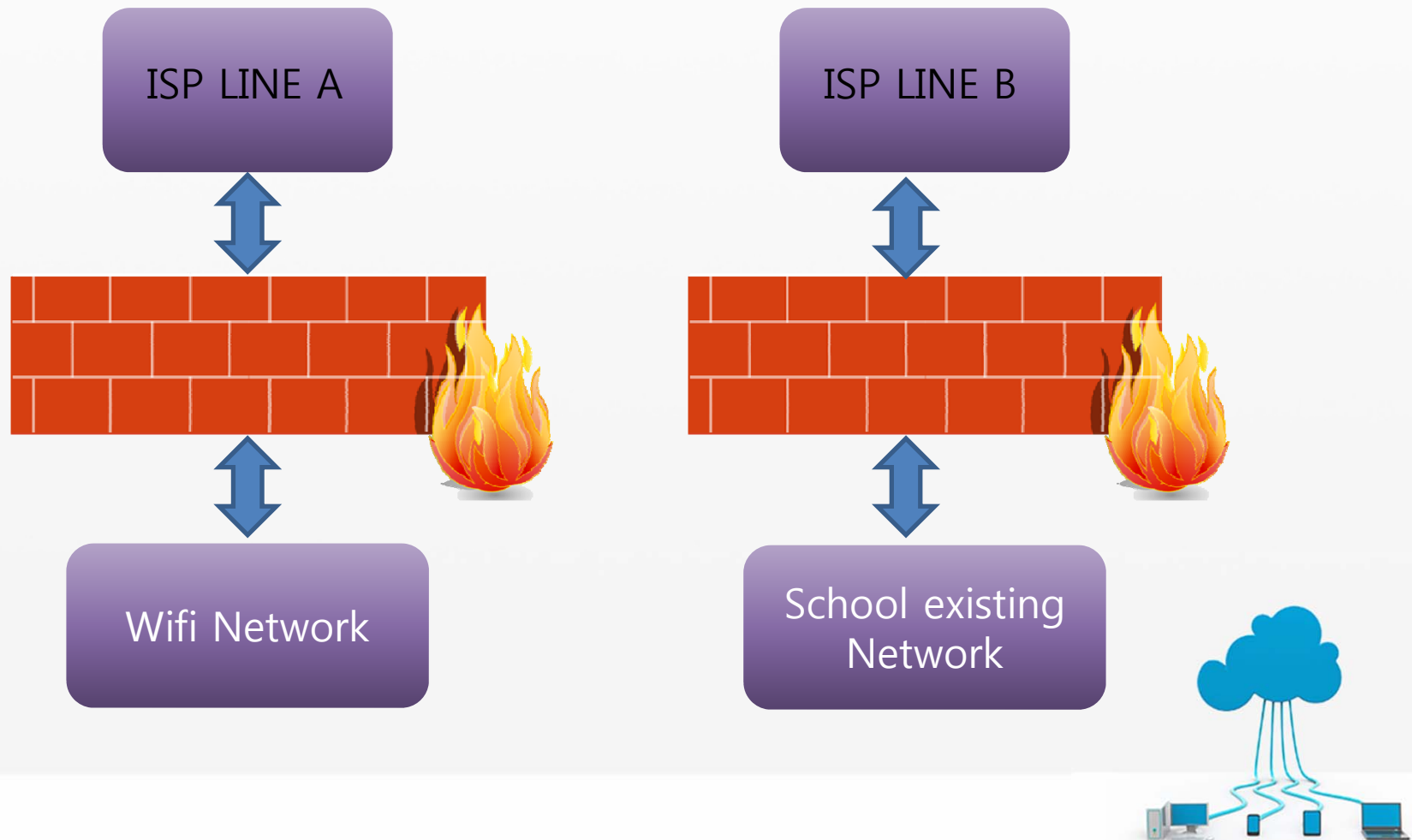
- Secure configurations for hardware and software on mobile devices, laptops, workstations, and servers
- Ensure that appropriate filtering and monitoring is in place.
- Inventory of Authorized and Unauthorized Devices
- Managing user privileges
- Malware prevention
- Patch system software and application software
- Data Recovery Capability \_
- Limitation and Control of Network Ports, Protocols, and Services
- Data Protection



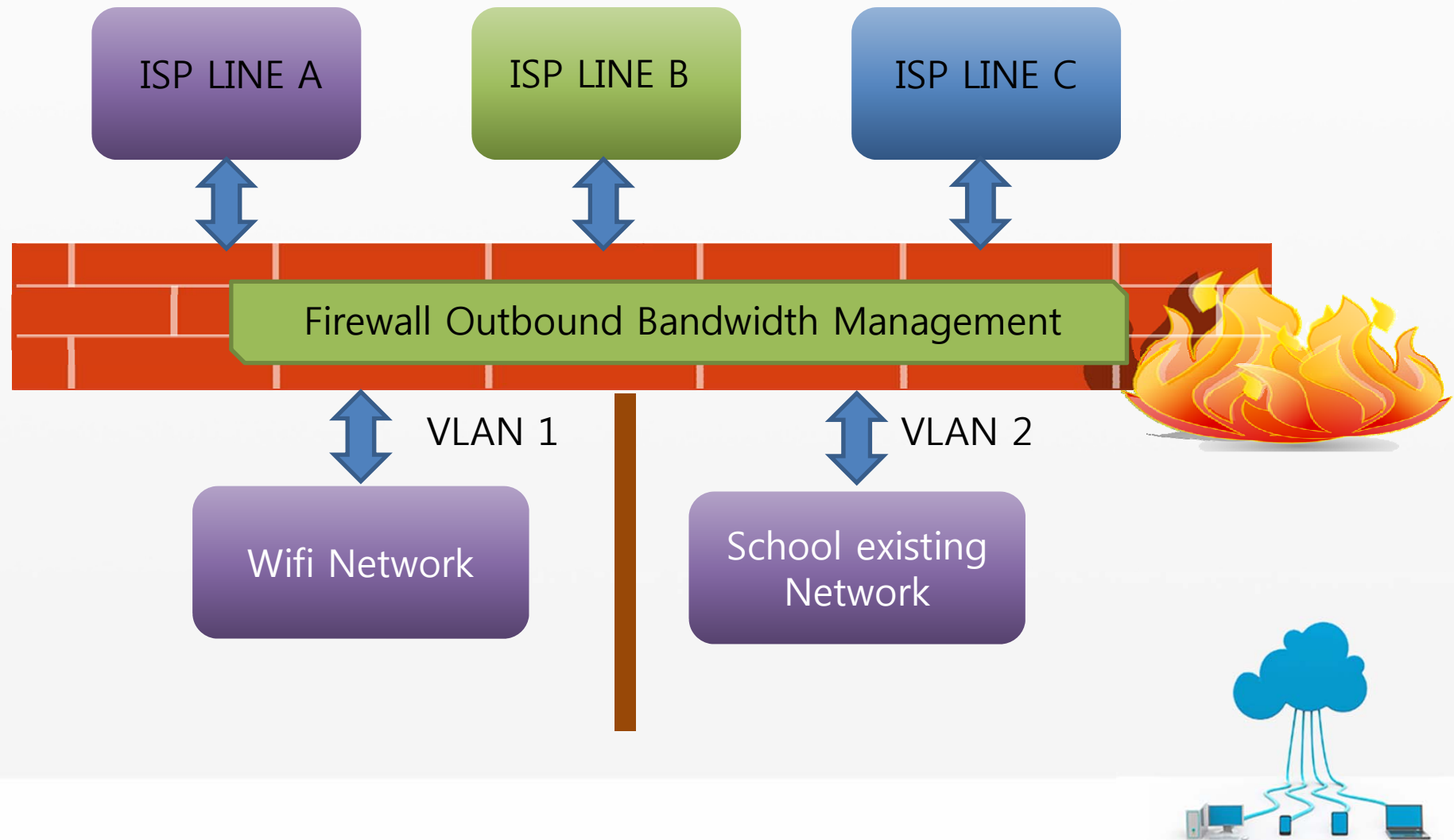
# Wi-Fi Network and Existing School Network (Model 1)



# Wi-Fi Network and Existing School Network (Model 2)



# Wi-Fi Network and Existing School Network (Model 3)



# Wifi Access Control



SSID :  
BHSS\_GUEST

- Password login and password change regularly
- Bandwidth 15Mbps/15Mbps
- Disconnect after 2 hours

SSID :  
BHSS\_STUDENT

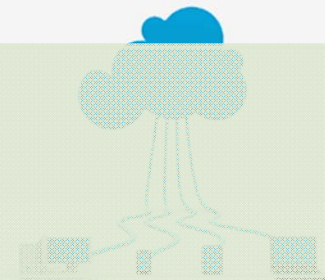
- Student account login
- Bandwidth 15Mbps/20Mbps
- Need to relogin after 3 days disconnect

SSID :  
BHSS\_TEACHER

- Teacher account login
- Bandwidth 40Mbps/40Mbps
- Need to relogin after 3 days disconnect

SSID : elearning

- MAC-based authentication
- Bandwidth 20Mbps/30Mbps





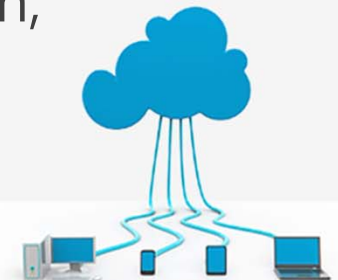
# Mobile device management Device Enrollment Program (IOS) / Zero Touch Enrollment (Android)

- Force the device to enroll with SimpleMDM
- Select which SimpleMDM group devices should initially join
- Disable users ability to un-enroll from SimpleMDM manually
- Place device in supervised mode
  - Skip passcode setup, location services, restoring from backup, signing in to Apple ID and iCloud, Apple Pay setup



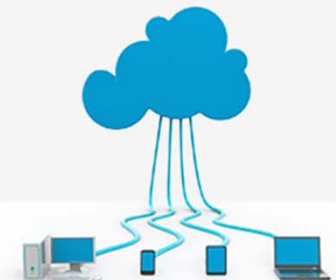
# Education and Training

- Ensure the whole school community is aware of what is appropriate online behaviour and understand the sanctions for misuse.
- For teachers :  
Implement regular training for all members of staff
- For TSS :  
Refresh knowledge and skill at regular intervals to enable them to keep up-to-date with current research, legislation and trends



# Education and Training

- For students :
  - Ensure that appropriate cyber security education is embedded throughout the curriculum; promoting the responsible use of technology and empowering students to keep themselves and others safe online
  - Actively engage with events to promote positive online behavior
- For parents :
  - Ensure that online safety is promoted to parents through a variety of channels and approaches



http://med



香港青年協會

主頁 關於我



# PROJECT NET

## 新媒體素養提升計劃

# 新媒體素養

## 教案比賽

香港青年協會  
媒體輔導中心

互動教材



5 分鐘



主辦機構



香港青年協會  
the hongkong federation of youth groups

贊助



優質教育基金  
Quality Education Fund

支持機構

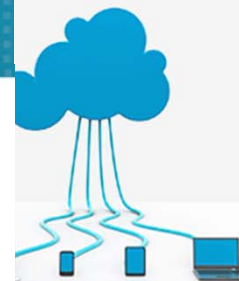
香港浸會大學  
傳理學院新聞系

香港翻譯教學協會



媒體伙伴

明報







<https://www.hkace.org.hk/>






# Standards and Inspection

- Evaluate the delivery and impact of the settings security policy and practice
- Review any reported online safety incidents to inform and improve future areas of teaching, training and policy development
- Regular Vulnerability Assessment and Remediation





## 資訊科技保安風險評估 - 學校篇

自第四個資訊科技教育策略推出至今，學校的無線網絡基建已基本完成，以自攜裝置（BYOD）進行電子學習的學校亦逐漸增加。在推行電子學習的同時亦要提高學校對保護學校、學生和家長的資料及資訊科技資產的警覺。根據教育局的《學校資訊保安建議措施》所述，學校有責任採取適當的資訊科技保安措施，以保護學校的資訊科技系統和數據。

資訊科技保安風險評估跟體檢大致相同，藉著定期檢查希望能夠發現一些隱藏的病毒或潛在的風險。透過重複評估與使用資訊科技相關之保安風險的程序，過程中把收集到的數據進行評估和分析，呈報已發現的保安漏洞，並作出評估及提出相關安全性的建議。

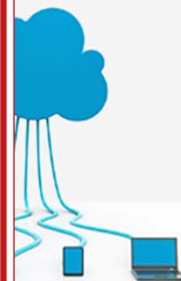
### 資訊科技保安風險評估

在眾多的資訊科技系統中，學校最多使用而又連接到互聯網的便是學校的網站。要使有關網站的數位服務系統和應用系統的安全，良好的設計和開發過程是必須重視的。有見及此，我們顛拍了專業網絡安全管理專家 **UDomain** 為學校進行保安風險評估，以網站弱點性測試及滲透測試\*為學校網站分析和測試數位服務的安全性。這樣的安全測試工作，應當作是學校專案中要持續進行的活動，不應當作是最後或有需要時才執行的一項檢查。

#### 網站弱點測試 (Vulnerability Test) –

- 找出網站漏洞
- 進行系統掃描
- 有助系統達致符合保安及審查的標準

**免費評估 名額 10 個**  
(由專業網絡安全管理專家  
**UDomain** 提供)



# Further resources

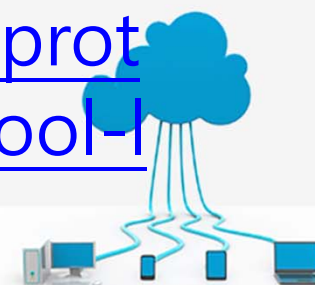
## School e-Security Checklist –

- 20 e-security controls

<https://www.tripwire.com/state-of-security/security-data-protection/20-critical-security-controls-control-1-inventory-of-authorized-and-unauthorized-devices/>

- 10 steps to protect your school's network

<http://www.nen.gov.uk/advice/10-steps-to-protect-your-school-s-network-a-guide-for-school-leaders>



# THANK YOU

