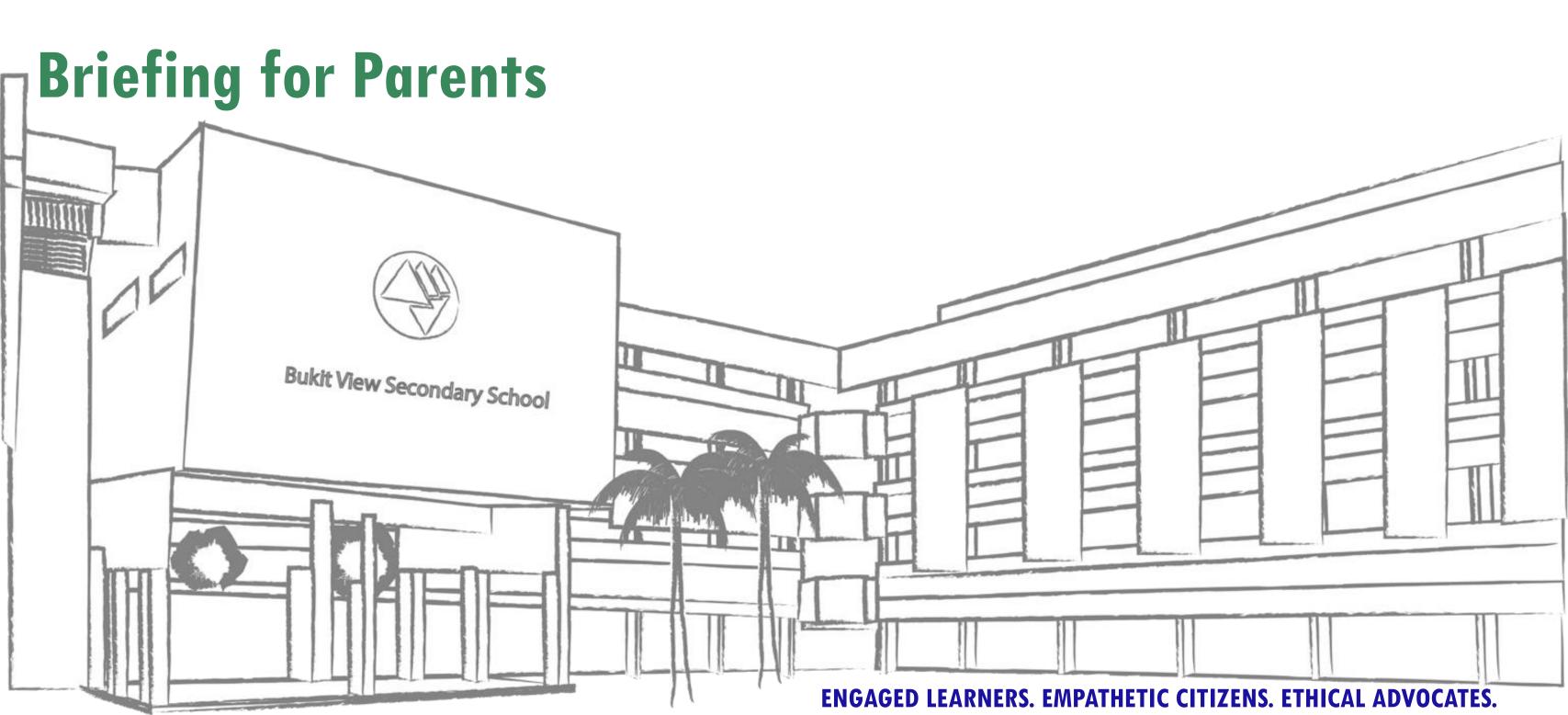
## The Personal Learning Device (PLD) Initiative



## The National Digital Literacy Programme and the PLD Initiative

**An Overview** 



# The National Digital Literacy Programme (NDLP)

- 1. The NDLP was launched in March 2020 to help students **strengthen their digital literacy and acquire digital skills** needed to navigate an increasingly digitalised world.
- Under the NDLP, every secondary school student will own a school-prescribed Personal Learning Device (PLD). Students may use funds from their Edusave Account to pay for the PLD.



# Intended Outcomes of the PLD Initiative

The use of the PLD for teaching and learning aims to:



Support the Development of Digital Literacy



**Support Self-Directed and Collaborative Learning** 



**Enhance Teaching and Learning** 



## Students' Experiences





## Learning with a PLD Bukit View Secondary School



# In BVSS, students are taught to be...

### Ethical Digital Learners

- promote positive engagement, relationships and health in the digital domain.
- equip our students on AI literacy to understand the potential benefits, limitations, and risks

## **Empowered Digital Change Makers**

- self-directed learners who set their own learning goals, practice critical and reflective thinking, and extend their own learning beyond the classroom.
- leverage AI tools effectively for learning and application in their daily life

## Engaged Digital Learners

- adaptable learners that are able to keep up with technological advances and using digital productivity tools effectively
- active participants in digital learning who advocate a culture of collaborative learning through use of technology.



# Your child/ward will be using the device...

for in class and out-of-class activities to promote active learning and greater personalisation ☐ for activities that require research, digital creation and collaborative learning ☐ for reviewing past lessons, accessing digital resources on Singapore Student Learning Space (SLS) and other digital platforms to enhance their learning, or exploring topics of their own personal interests. ☐ to make use of digital tools such as calendaring and note-taking applications to enhance their personal productivity.

## Supporting Students in the Safe and Effective Use of the Devices



## Cyber Wellness Concerns Identified by Local Studies/Surveys



Harmful Online Content





Gaming and associated risks



Excessive social media use



## Supporting Students in the Safe and Effective Use of the Devices

The school has measures in place to enable a safer digital environment for learning with the use of PLDs, e.g.

- School rules on digital device use
- Classroom management and routines
- Cyber Wellness Education in CCE
- Partnering parents/guardians to support students in their use of technology for learning
- Device Management Application (DMA) to support a safer digital environment for learning



## Cyber Wellness Education in CCE

Throughout their Secondary School education, students will learn about:

- Balanced use and self control
- Cyber bullying and Upstanding
- How to be a positive influence online
- How to handle online falsehoods
- How to manage social media (peer influence, emotions, echo chambers)
- Online relationship and Online safety (grooming, self disclosure)
- To respect intellectual property rights



## Parents'/Guardians' Role

- We would like to partner parents/guardians so that students are well supported in their use of technology for learning.
- As parents/guardians, you can help in the following ways:
  - Model good digital habits for your child/ward e.g.
     parents/guardians not using devices during family meals.
  - Know your child/ward well, and have conversations with your child/ward about safe and responsible use of technology.
  - o Discuss and come up with ground rules for internet/device usage that both your child/ward and you can agree with.
  - Encourage your child/ward to use productivity tools using his/her PLD, to organise information and simplify tasks for efficiency.

## Role of the DMA in Providing a Safer Digital Environment for Learning



### DMA Installation

- The iPad Device Management Application (DMA) solution, Jamf, will be installed on all students' devices to provide a safe learning experience for students. The DMA will be funded by MOE. The DMA will be funded by MOE.
- DMA will be installed after the collection of the device. Students will be guided on the installation.
- The installation of DMA applies to both devices purchased through the school and any student-owned devices that parents/guardians opt for the student to use in lieu of the school-prescribed PLD.
- The DMA will be uninstalled from the device when students graduate or leave the school.



- 1. After-School DMA Parent Options provide parents with the flexibility in managing your child's/ward's use of PLD after school hours.
- 2. The following tables outline the different levels of restrictions, controls, and monitoring for each After-School DMA Parent Option.

Default	Option A	Option B
In-school DMA settings will continue after school hours	DMA settings can be modified by Parents/Guardians after school hours	DMA will be inactive* after school hours
For parents/guardians who want their child's/ward's use of the device to be restricted only to teaching and learning, and prefer to leave it to the school to decide on DMA settings after school hours.	For parents/guardians who prefer to take charge of the level of restrictions for their child's/ward's use of the device after school hours regulated by the DMA.	For parents/guardians who do not want their child's/ward's use of the device after school hours to be regulated by the DMA at all.

<sup>\*</sup>No data will be collected after school hours when the DMA is inactive.

- Having default school settings continue after school hours is the best option for parents/guardians who prefer not to, or do not feel ready to manage their child's/ward's device use on their own.
- Parents/guardians can request to change their choice of DMA settings, which is the existing practice.



	Default Setting (This will apply if no Alternative Setting is chosen)	Alternative Setting: Option A (DMA settings can be modified from the Default settings in place)	Alternative Setting: Option B (DMA will be inactive only after school hours)
Protect students from objectionable content	Web content filtering will include, but not limited to the following categories:  • Violent/extremist content  • Sexual/pornographic content  • Gambling-related content	Parents/Guardians will be able to include additional web content filtering by submitting a request to the school.	No content filtering at all after school hours.

	Default Setting (This will apply if no Alternative Setting is chosen)	Alternative Setting: Option A (DMA settings can be modified from the Default settings in place)	Alternative Setting: Option B (DMA will be inactive only after school hours)
Reduce distractions from learning through control of applications	Parents/Guardians and students will be unable to install additional applications.	<ol> <li>Parents/Guardians and/or students will be able to install additional applications after school hours.</li> <li>Applications installed by parents/guardians and/or students after school hours will not be accessible during school hours.</li> <li>Parents/Guardians can limit access to applications installed on the device.</li> </ol>	<ol> <li>Parents/Guardians and/or students will be able to install additional applications after school hours.</li> <li>Applications installed by parents/guardians and/or students after school hours will not be accessible during school hours.</li> </ol>

	Default Setting (This will apply if no Alternative Setting is chosen)	Alternative Setting: Option A (DMA settings can be modified from the Default settings in place)	Alternative Setting: Option B (DMA will be inactive only after school hours)
Limit screen time	The school will define the specific hours during which the student can use the device.	<ol> <li>Parents/Guardians can adjust their child's/ward's screen time by setting rules on the device*.</li> <li>Parents can determine the duration of use of specified applications.</li> </ol>	No control over screen time.
Monitor	Parents/Guardians will <u>not</u> be	Parents/Guardians will <u>not</u> be able to	Parents/Guardians will <u>not</u> be able to
students'	able to track their	track their child's/ward's browser	monitor or control their child's/ward's
cyber activities	child's/ward's browser history.	history via the parent account.	use of the device through the DMA.
Provision of Parent Account	X	✓	X

## Support for Parents/Guardians

Parents/guardians may wish to consider the following questions to decide the After-School DMA Parent Option that best suits your child/ward.



#### A. Child's/ward's current device usage habits

- How much time does my child/ward spend on their device?
- How well is my child/ward able to regulate their device usage on their own?
- Does my child/ward get easily distracted while doing online learning?



#### B. Parents'/Guardians' involvement

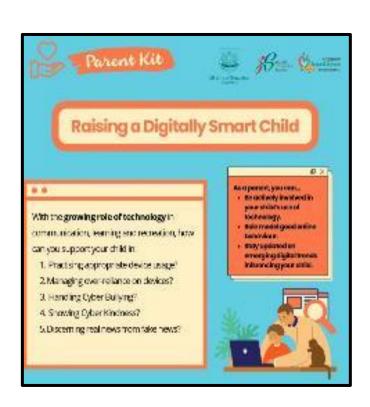
- How confident and familiar am I with managing my child's/ward's cyber wellness?
- Are there existing routines and open conversations on the use of the Internet at home?
- Am I aware of how to prevent different types of cyber threats that my child/ward might face?



## **Supporting Resources**

Parents/guardians play a crucial role in guiding your child/ward to use devices responsibly and safely. DMA complements your efforts in supporting your child/ward as they navigate the digital space. Here are some resources that you can refer to:

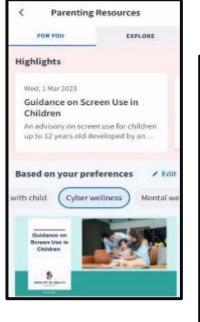
#### A. Parent Kit



#### B. Bite-size tips and advice via Parentingwith.MOEsg Instagram



## C. Resources from MOE and other agencies (available on resources repository in Parents Gateway)



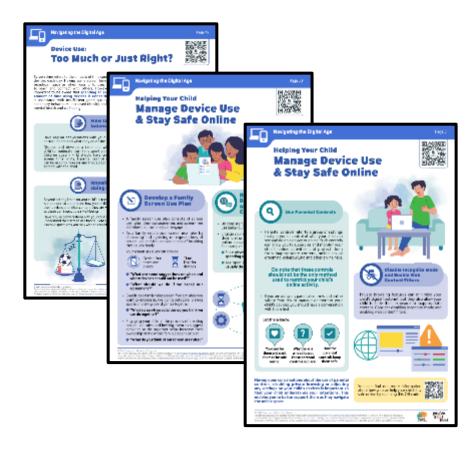




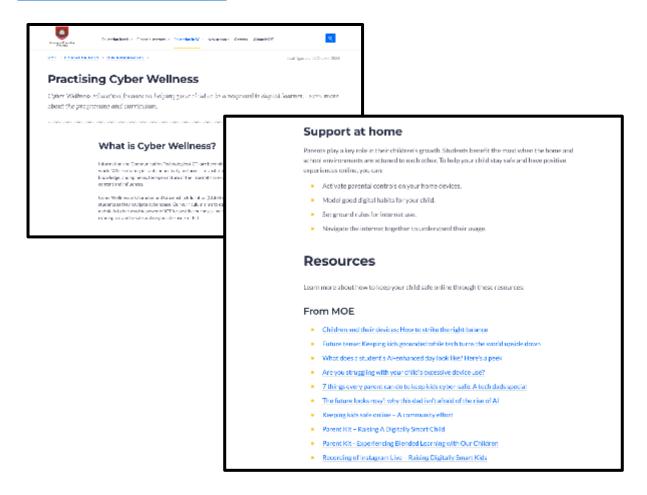
## **Supporting Resources**

#### **D. Parenting for Wellness Toolbox for Parents**

The following extracted quick tips and strategies have been shared to you via Parents Gateway. Click on the pink header to download the full suite of resources of the Toolbox.



### E. More resources are available via MOE Cyber Wellness Webpage

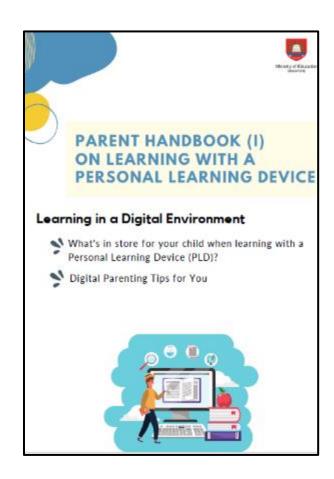


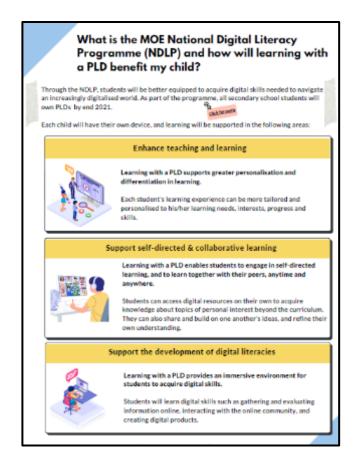


## Supporting Resources

#### F. Parent Handbooks (I) and (II) on Learning with a Personal Learning Device

These Handbooks provide tips on supporting your child in the use of PLDs for learning and are shared via the PG notification together with the letter to purchase PLDs.







## Data Collected by the DMA

#### The DMA does **NOT** collect any of the following data:

- Login IDs and passwords entered into websites or into any applications
- Actions performed (e.g. posts, online comments, items added to a shopping cart, etc.) when visiting websites and using apps
- Documents and photos stored in the PLDs
- PLD location
- Webcam videos and microphone recordings



## **Data Security**

 All user data collected through the DMA will be stored in secure servers managed by appointed DMA Vendors with stringent access controls and audit trials implemented. The DMA solutions used are cloud-based Software-as-a-Service (SaaS) solutions and are trusted solutions that have been operating for many years. They have also been subject to regular security review and assessment by independent reviewers.

## Data Security

- DMA solutions have sufficient security robustness to ensure data collected are properly stored and protected.
   MOE will also subject the DMA Vendors to regular audit on the security of the system based on tender requirements.
- To prevent unauthorised access, DMA Administrators and DMA Vendors will be required to access their accounts using 2-factor authentication or the equivalent to ensure proper accountability for information access and other activities performed. There will be regular account reviews and audits for DMA Administrators' and DMA Vendors' accounts.



## Device and Funding Information



## Bukit View Secondary School's PLD



## Apple iPad 10.9 10th Gen (Enhanced)

- Processor: A14 Bionic Processor
- Memory (GB): 4GB
- Storage (GB): 64GB
- Comes with the following accessories:
  - Apple Pencil (USB-C)
  - Logitech Ruggedized Combo 4



## **Bukit View Secondary School's PLD**



The school chose the device because of:

- Portability
- Durability
- T&L Affordances
  - touch screen
  - use of stylus pen to write (Inking function)
  - typing using keyboard
  - video recording
  - multimedia editing



### PLD Bundle

#### **Device Bundle includes**

- Model: Apple iPad 10.9 10th Gen

- Processor: A14 Bionic Processor

- Memory (GB): 4GB

- Storage (GB): 64GB

#### Accessories Item(s):

- Apple Pencil (USB-C)
- Logitech Ruggedized Combo 4

Your child's/ward's PLD will come with the **Enhanced Device Bundle** which includes:

- 3-year warranty and
- 3-year insurance (which includes 2 repairs or 1 replacement claim)

Please note that the price of the PLD Bundle may appear to be higher than similar models on the retail market as the price of those devices usually does not include extended warranty and insurance coverage.



## Insurance Coverage

The package includes a 3-year warranty, and 3-year insurance\* which includes:

Insurance Coverage	Claimable
• Fire	*2 repairs or 1 replacement claim
• Lightning	(3-year insurance)
Power Surges	
<ul> <li>Accidental e.g water spillage, drop etc</li> </ul>	
Theft due to forcible entry	
• Robbery	
* Accidental loss will not be covered by insurance.	



- The cost of the device bundle can be paid using your child's/ward's Edusave account, after setting aside provision for payment of miscellaneous fees.
- To ensure the affordability of devices, MOE has provided additional Edusave top-ups of \$200 in 2020 to 2022, and \$300 in 2023, to all eligible Singaporean students in primary and secondary schools.
- This is on top of the annual \$290 credited into the Edusave account for Secondary School students and \$230 for Primary School students.



 For SC students who are on MOE Financial Assistance Scheme or whose family's monthly income meets the following criteria:

Gross Household Income (GHI) ≤ \$3,000, or Per Capita Income (PCI) ≤ \$750

MOE will subsidise 50% of device bundle cost or \$350, whichever is lower.

• The remaining amount will be payable from the students' Edusave account. If there is insufficient balance in the students' Edusave account for the remaining amount, MOE will provide additional subsidy so that the cash out-of-pocket (OOP) is \$0.



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MOE will subsidise 50% of device bundle cost or \$350, whichever is lower.

• The remaining amount will be payable from the students' Edusave account. If there is insufficient balance in the students' Edusave account for the remaining amount, MOE will provide additional subsidy so that the cash out-of-pocket (OOP) is \$0.



• SC students whose family's monthly Gross Household Income (GHI) > \$4,400 or monthly Per Capita Income (PCI) > \$1,100, no subsidy will be provided. Parents/Guardians can use their child's/ward's Edusave or cash to defray the device bundle cost.

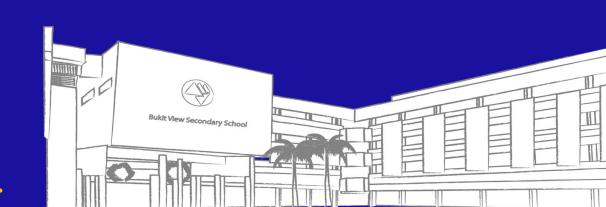
• Permanent residents (PR) and international students (IS) who need support could apply for subsidies, particularly those whose Gross Household Income (GHI) is below \$4,400 or Per Capita Income (PCI)# is below \$1,100.

• For more details, please approach the school.

#PCI is Gross Household Income divided by the number of household members.



# What's Next?



## Parental Consent for Procurement

- 1. Parents can access the **Parental Consent for the Purchase of Personal Learning Device (PLD)** via a

  Parents Gateway (PG) notification\* that will be sent to you by 10 Jan 2025.
- 2. Parents who want to use Edusave funds for the PLD (for Singapore Citizens students only), please submit the online Standing Order Form via this link: https://go.gov.sg/edusaveformsgso by 15 Jan 2025 if you have not done so previously.\*



# For Singapore Citizens (SC) Students

Time Frame	Activity
By 17 Jan 2025	<ol> <li>Submit:         <ul> <li>consent to PLD purchase via in the PG notification which includes the following:</li></ul></li></ol>
By March 2025 (TBC)	Collection of devices by students

30

#### **WHAT'S NEXT?**

# For Permanent Residents / International Students

Time Frame	Activity
By 17 Jan 2025	<ol> <li>Submit consent to PLD purchase which includes the following:         <ul> <li>Intent to Purchase Personal Learning Device (PLD);</li> <li>Authorisation Form for the Collection of PLD</li> </ul> </li> <li>Parents without access to PG can submit their consent via hardcopy.</li> <li>Forms are to be submitted to the General Office.</li> </ol>
By Feb 2025	Parent/Guardian to make payment via Giro/PayNow
By March 2025 (TBC)	Collection of devices by students

40

#### **Collection of Devices**

Your child/ward will be collecting his/her device in school **from March 2025** 

If you would like to personally/have another adult to verify the condition of the device during collection with your child/ward:

- You may arrange to collect the device at the vendor's service/collection centre\* or appoint an adult proxy to do so.
- Your child/ward would need to bring the device to school and arrange for the school's IT department to install the DMA.

Please approach the school for further advice or clarification if you would like to make this arrangement.

<sup>\*</sup>Parents/Guardians (or adult proxy) will **not** be able to collect the PLD from the school.

# **Important Contacts / Helplines**

Contact / Helpline
https://www.bukitviewsec.moe.edu.sg/
6260 0777
6566 1990 / bukitview_ss@moe.edu.sg
HOD Ed-Tech Mr Alexander Chia alexander_s_chia@schools.gov.sg
SH Ed-Teck Mr Kendrick Tan
kendrick_tan@schools.gov.sg
ICT Manager Mr Vicnes Kumar vicnes kumar perumal@schools.gov.sg

# **Important Contacts / Helplines**

To access / find out more about	Contact / Helpline
Cyber Wellness Matters	HOD Ed-Tech Mr Alexander Chia alexander_s_chia@schools.gov.sg  SH Ed-Teck Mr Kendrick Tan
	kendrick_tan@schools.gov.sg
Device Management Application	ICT Manager Mr Vicnes Kumar vicnes kumar perumal@schools.gov.sg

43

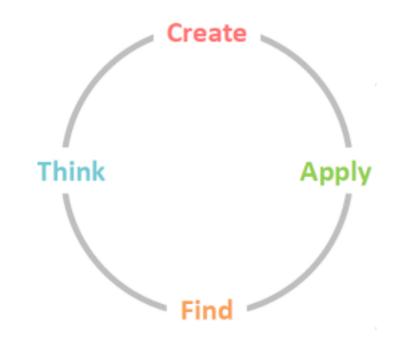
# THANK YOU.



# ANNEX

# The National Digital Literacy Programme (NDLP)

The 'Find, Think, Apply and Create' framework:



Find	Critically gather and evaluate information from, and use digital resources in a safe, secure, responsible and ethical manner
Think	Interpret and analyse data, and solve problems
Apply	Use software and devices to facilitate the use of knowledge and skills in new contexts; keep up with technological developments
Create	Produce content and artefacts, and engage and collaborate with others digitally

# AsiaPac Service Centre Location and Contact

Operating Hours: Monday - Friday 09.00am - 06.00pm. Closed on Saturday & Sunday & Public Holiday

Blk 219 Henderson Road #05-01/02/03/04 Henderson Industrial Park Singapore 159556

AsiaPac Hotline: (65) 6272 0088 pdlp.support@asiapac.com.sg

# Technical Problem?

Students may proceed to the Tech Station at Level 3 during recess or after school



## **Components of DMA**

The Device Management Application (DMA) software consists of the following three components:

- Mobile Device Management Service
- Classroom Management Service
- Usage Management Service

## **DMA Components and their Functions**

#### 1. Mobile Device Management Service (MDM)<sup>1</sup>

This facilitates the updating and management of the PLDs, protects PLDs from malicious software, and protects your child/ward from objectionable internet content, or content that may not be conducive to teaching and learning during school hours.

- Facilitates automatic installation of applications required for teaching and learning
- Filters objectionable content or content that may not be conducive to teaching and learning (e.g. social media, pornography, gambling, or websites containing extremist content)
- Enables automatic updating of PLD OS and its applications in accordance with cybersecurity best practices.

<sup>&</sup>lt;sup>1</sup> MDM is a <u>core service</u> that is required to deliver Classroom Management Service and Usage Management Service (which includes the Parental Control app).

## **DMA Components and their Functions**

#### 2. Classroom Management Service (CMS)2

Enables teachers to manage the student's use of the PLD during lesson time to improve classroom management and support effective teaching and learning. Teachers will only be able to view students' screens during lessons.

During lessons, teachers will be able to:

- Guide and monitor students' use of devices (e.g., lock or unlock screen to redirect students' attention or screen sharing)
- Launch specific applications and/or websites for teaching and learning on your child's/ward's device
- Facilitate the sharing of content

<sup>&</sup>lt;sup>2</sup>CMS will be rolled out by Semester 1, 2025 for all schools.

## **DMA Components and their Functions**

#### 3. Usage Management Service (UMS)\*

Enables the school and/or parents/guardians\* to better supervise and set helpful limits for your child's/ward's use of the PLD after school.

- Screen time control to allow school and/or parents/guardians to set usage limits so that your child/ward does not use the PLD excessively
- School and/or parents/guardians can control installation of applications to ensure that the device is used optimally for teaching and learning
- Filters objectionable content to protect students from harmful content
- Parents/Guardians can manage device usage of their child/ward

<sup>\*</sup> Only available for parents/guardian on Option A.

## Types and Purpose of Data Collected by DMA



Data for DMA Administrative Purposes



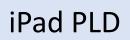
Data for Application Management



Data for Web Content Filtering



Data for Sharing Students' Screen



# Data for DMA Administrative Purposes

Essential for DMA and lesson set up and management of devices through DMA

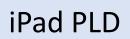
#### **Examples:**

- Students' and parents'/guardian's information (name, school name, email addresses, and class)
- Apps installed in your child's /ward's PLD
- Device and hardware information (e.g. device model, storage space)

#### Accessible by:

- Teachers
- DMA Administrators in school and at MOE
- DMA Vendors

Only parents/guardians who shose Option A for the After-School DMA Parent Option will have access of their child's/ ward's information i.e. student's name and email address, and the applications installed on the PLD.





Filtering of harmful content to ensure students' cyber safety

#### **Examples:**

- URLs accessed on the PLDs (Actions performed on websites are NOT captured)
- Date and time of the access
- Student profile (Name, School name)

#### Accessible by:

- DMA Administrators in school and at MOE<sup>1</sup>
- DMA Vendors

<sup>&</sup>lt;sup>1</sup>Only aggregated web browsing history can be retrieved which does not reference to specific user.





To ensure that the installed apps are updated and functioning properly

#### **Examples:**

- Installed apps and programs
- Date and time that the apps and programs were last updated
- Application error data<sup>1</sup>

#### Accessible by:

- Teachers (for activities during lessons)
- DMA Administrators in school and at MOE
- DMA Vendors

<sup>&</sup>lt;sup>1</sup>Teachers will not have access to the application error data.





## Data for Sharing Students' Screen

To allow teachers to check that students are on task, and address questions in class

#### **Examples:**

• Only the streaming of 'live' screen view (The screen view will **NOT** be stored)

#### Accessible by:

Teachers during lessons only

#### References

Information on <u>Slide 10</u> are obtained from:

- SHE and Global Shapers Singapore Hub Survey, 2023-<a href="https://www.digitalforlife.gov.sg/-/media/Digital-For-Life/Resources/Documents/2023/12/20230410-SHE-Infographics-on-Online-Myths.pdf">https://www.digitalforlife.gov.sg/-/media/Digital-For-Life/Resources/Documents/2023/12/20230410-SHE-Infographics-on-Online-Myths.pdf</a>
- Microsoft Online Safety Survey, 2024 <a href="https://news.microsoft.com/wp-content/uploads/prod/sites/40/2024/02/Microsoft-Global-Online-Safety-Survey-2024.pdf">https://news.microsoft.com/wp-content/uploads/prod/sites/40/2024/02/Microsoft-Global-Online-Safety-Survey-2024.pdf</a>
- Ministry of Digital Development and Information survey, 2024 <a href="https://www.mddi.gov.sg/media-centre/press-releases/survey-on-childs-online-gaming-activities/">https://www.mddi.gov.sg/media-centre/press-releases/survey-on-childs-online-gaming-activities/</a>
- Institute of Mental Health, 2024 <a href="https://www.imh.com.sg/Newsroom/News-Releases/Documents/NYMHS\_Press%20Release\_FINAL19Sep2024.pdf">https://www.imh.com.sg/Newsroom/News-Releases/Documents/NYMHS\_Press%20Release\_FINAL19Sep2024.pdf</a>