善用Mathspace在中小學提升學 與教效能

St. Margaret's Co-educational English Secondary and Primary School Mr. Lau Shing Wing 30 Sept 2020

Why do we choose 🖌 MATHSPACE ?

Reasons

- 1. BYOD scheme since 2014
- 2. Look for a platform focusing on student-centred learning
- 3. Trial Subscription in S.1 \rightarrow eREAP program

Considered the advantages of Mathspace

- 1. Adaptive learning platform
- 2. handwriting function, hints and video support
- 3. Step-by-step answer checking
- 4. Not only MC, but with short questions
- 5. eBook for self-learning

Implementation Timeline

2016/17 Trial of Mathspace under eREAP 2019/20 Extend the usage to P.5 and P.6 students

before 2015 Trial in S.1

2017/18 & 2018/19 S.1 to S.5 students to use Mathspace

2020/21 Promoting self-learning culture using Mathspace mainly focus on P.5 to S.3 students

Embedding Mathspace into our curriculum

Revision exercise and holiday assignment

2017/18

2016/17

Custom exercise as consolidation, Lesson learning task

2018/19

Pre-lesson task, Reading ebook as summer learning

2019/20

Self-learning – Mathspace Challenge

2020/21

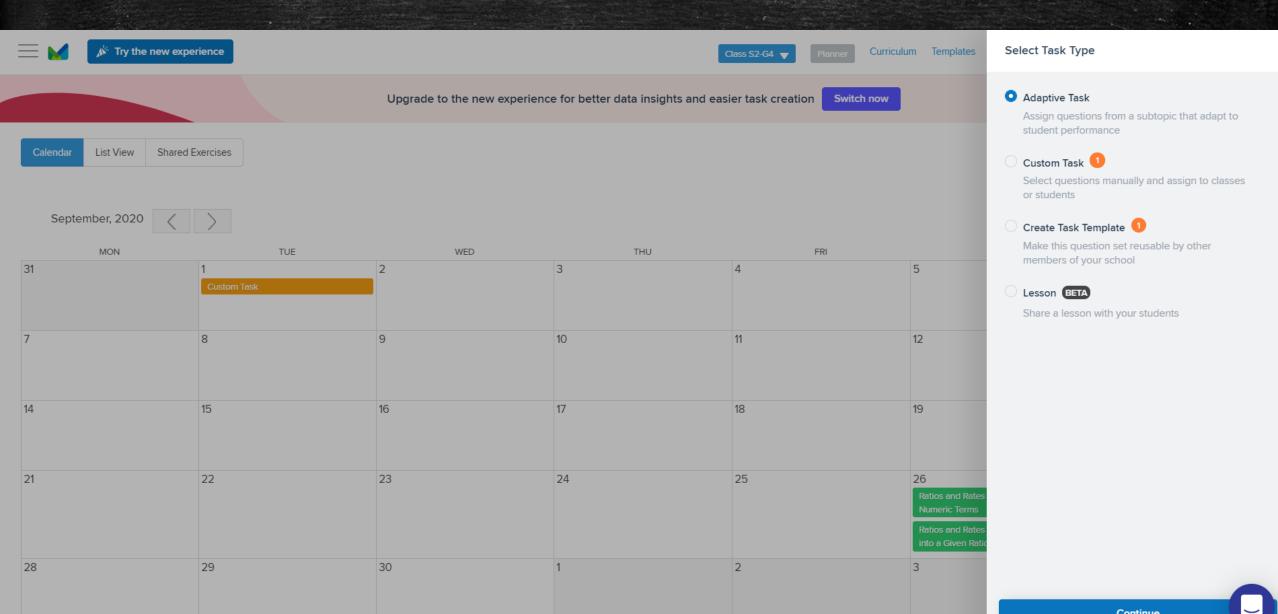
Changes in using Mathspace from 2016 to 2020

- 1. From Custom Exercise to Adaptive learning task
- 2. Not only about doing exercise, but focusing on learning
 - a) Pre-lesson task to revise the basic concepts
 - b) Post-lesson consolidation
 - c) Summer pre-learning of new knowledge
 - → Fully utilities the adaptive learning model on the platform

S1 Chapter 6	19 Feb 2018	HK Secondary S1-S3	Cheung Sin Wai
S1 UT revision	05 Mar 2018	HK Secondary S1-S3	Cheung Yuk Po
S2 Ch11 Trigo - 2 triangle problem	11 May 2017	HK Secondary S1-S3	Cheung Yuk Po
S2 Chapter 5.1	07 Dec 2017	HK Secondary S1-S3	Lau Shing Wing
S2 Chapter 5.1 & 5.2	11 Dec 2017	HK Secondary S1-S3	Lau Shing Wing
S2 Chapter 7	19 Feb 2018	HK Secondary S1-S3	Cheung Sin Wai
S3 Ch5 Areas and Volumes (III) - Volume of Right Pyramids	12 Jan 2018	HK Secondary S1-S3	Cheung Yuk Po
S3 Ch5 Areas and Volumes (III) - Volume of Right Pyramids	12 Jan 2018	HK Secondary S1-S3	Wong Man Kwun
S3 Ch5 pre-lesson exercise	20 Dec 2017	HK Secondary S1-S3	Cheung Yuk Po
S3 Ch5 revision	09 Feb 2018	HK Secondary S1-S3	Cheung Yuk Po
S3 Ch6 Exercise 1	04 Dec 2017	HK Secondary S1-S3	Cheung Yuk Po
S3 Ch7 percentage Ex	09 Apr 2018	HK Secondary S1-S3	Cheung Yuk Po
S3G1 - Ch10.2 Slope of straight line Exercise	09 May 2018	HK Secondary S1-S3	Cheung Yuk Po

Custom Exercise

Different task types



Why do we extend to Primary?

Not effective in catering the need in NSS curriculum

- Question bank is based on Australian curriculum
- Hard to cater the need of HKDSE types of questions
- Limited to use in S.1 to S.3 students in the past
- Worries and the concerns from the school
 - Their ability to handle the app
 - Health problem (e.g. short-sightedness)
 - Budget for whole primary section or for P.5 and P.6

Using Mathspace in Primary and its effectiveness

- 1. Started to use Mathspace in Primary in 2019/20
 - a) P.5 and P.6 students under the BYOD scheme.
 - b) Eager to use (lesson time / spare time) and adapted to the platform quickly
- 2. Focusing more on adaptive learning task
- 3. Effectiveness
 - a) Competition of the score
 - b) Some students explore new topics by themselves

Difficulties

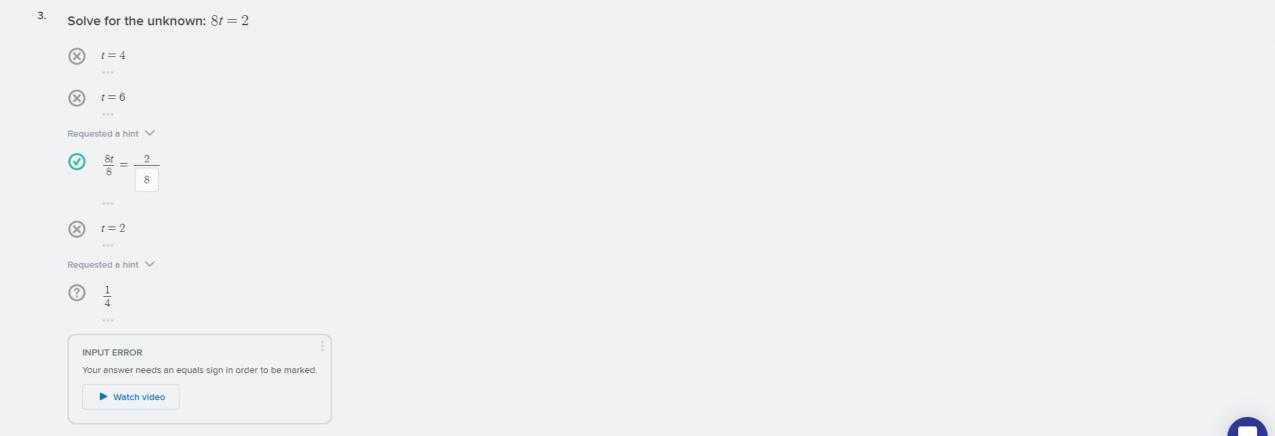
- 1st year to use in primary section
- Need more training to encourage teachers to use
- Participation rate
 - Reminders and incentives still needed to be given in order to finish the task
 - Incentives: award scheme to motivate the less able students to use Mathspace frequently

Example of a student's task

Equations > One Step Equations

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

Achieved: 100 mastery out of 100 target



Example - Secondary

Try the new experience	Class S3-C 🔻	Planner	Curriculum	Templates	Mastery	/ Grades	Admin	+ Create Task	?
CHAN YUEN KIU						4398		Remove	
CHENG YAN CHUEN						3220		Remove	
CHIU LONG KWAN VICTOR						1865		Remove	
CHU SHIU YING						3725		Remove	
HO KAYLEIGH						2450		Remove	
HO MATTHEW						2060		Remove	
HO SHUN HIM						3055		Remove	
HO WING KIU						2685		Remove	
IP HONG CHING						1670		Remove	
KAM SHUN CHEE						3445		Remove	
KHAN SAFWANA ALI						1005		Remove	
KWOK HIU TSUN						5635		Remove	
LAI LOK CHING COBY						1221		Remove	
LAU HOI YIU						140		Remove	
LEE YIN TING ALVIN						1400		Remove	
LEONG ZEE WAI EUNIS						3885		Remove	
LEUNG HIU CHING						2965		Remove	
LEUNG KA CHEUNG						2438		Remove	
LEUNG WING NING CHLOE						9881		Remove	
LI LOK YEE ZOE						2430		Remove	
LIU SUM YEE ZOE						3700		Remove	
LOGINOVA VERONIKA						2084		Remove	

Example - Primary

Try the new experience	Class P6-A 🔻	Planner	Curriculum	Templates	Mastery	Grades	Admin	+ Create Task	?
CHANG TSZ YAN					7	578		Remove	
CHAN MIKAIL NUR AZMIR					8	094		Remove	
CHEUNG LOK YIN					3	90		Remove	
CHOW CHUN HIN					5	60		Remove	
CHUI YAN HO					2	673		Remove	
CHUNG CHING SONIJA					1	400		Remove	
CHUNG SHU YIU					1	500		Remove	
CHUNG WING YIN WINNIE					6	788		Remove	
HO CHEUK LAM					6	80		Remove	
HO JACK YAT HEI					4	520		Remove	
HO YU CHIN					5	90		Remove	
KAUR JASDEEP					8	05		Remove	
KONG HOI LAM					1	472		Remove	
LAM WING TUNG CONSTANCE					3	025		Remove	
LAU LEANNA					4	05		Remove	
LAU LOK HIN					1	405		Remove	
LI CHOI YEE CHLOE					g	30		Remove	
Liu Sum Wai					3	78		Remove	
LO CHUN TIK					1	570		Remove	
LUI HO YAN					2	20		Remove	
MAN TSZ CHING					1	269		Remove	
NAIR ADITYA					3	833		Remove	

Planning for the year 2020/21

- Using Mathspace to create the culture of self-learning habit
 Mathspace Challenge
 - Setup award scheme
 - Award prizes to top 3 scores of the students in each class and each level

Thank you

O & A