

# Experience Sharing of using OQB to enhance students' learning

AU Yun-nam  
Ho Lap College

# Background

- ▶ COVID-19 outbreak in January 2020
- ▶ Learn at home
- ▶ In Feb 2020, some teachers were not familiar with on-line teaching. As panel chairman, we need to arrange some centralized homework for all students to monitor the progress.

# Platform

- ▶ HKEDCITY On-line Question Bank (OQB)
- ▶ Collection of a number of questions, not only HKCEE/HKDSE questions, but also extra questions from other resources.
- ▶ The questions are clearly classified by topics and levels.
- ▶ Easy to create a test.
- ▶ Teachers can monitor the students' progress.
- ▶ The reports can be used as learning for learning.

# Planning

- ▶ Create the on-line practices by topic.
- ▶ For Revision only.
- ▶ Level 1/Level 2 in each test are given in order to cater for diversity.
- ▶ In order to encourage Ss to practice, longer period assigned for each test/practice.
- ▶ 10-15 Questions in each test/practice.
- ▶ F.1-F.3 (STAR), F.4-F.5 (OQB)

# Planning

- ▶ Most Ss were not familiar using electronic learning platform at that moment.
- ▶ Self-made Video for teaching students how to enter hkedcity account and assess STAR/OQB from our school website
- ▶ How to retrieve the username and password
- ▶ Starts from Mathematics Department
- ▶ Promotion to other teachers

# Examples

## HKEDCITY On-line Question Bank Schedule (Week 1)

Release Date	Topic and Title	F.4	F.5	F.6
3-2-2020	Indices, Formula and Functions Level 1 Indices, Formula and Functions Level 2	Y	Y	Y
5-2-2020	Linear and Quadratic Equations Level 1 Linear and Quadratic Equations Level 2	Y	Y	Y
7-2-2020	Quadratic Equation and Graph Level 1 Quadratic Equation and Graph Level 2	Y	Y	Y
9-2-2020	Coordinate Geometry of St. lines Level 1 Coordinate Geometry of St. lines Level 2	Y	-	-
9-2-2020	Plane Geometry and Circle Level 1 Plane Geometry and Circle Level 2	Y	Y	Y

## HKEDCITY STAR & On-line Question Bank Schedule (Week 2)

HKEDCITY on-line elearning Platform

Username: hlc-s201XXXX [hlc-(RegNo)]

Password: stu-YYYYMMDD (Brithdayof Ss)



Students use school gmail (Google) to login

會員登入:



☐ 保持登入 ☐ 顯示密碼

[忘記密碼](#) | [忘記帳戶](#)

登入

或以其他帳戶登入:



加入成為會員:

註冊

Release Date	Topic and Title	F.4	F.5	F.6
11-2-2020	Polynomial Level 1 Polynomial Level 2	Y	Y	Y
13-2-2020	Quadratic Equation and Graph Set 3 Quadratic Equation and Graph Set 4	Y	Y	Y
13-2-2020	Inequalities and Linear Programming Set 1 Inequalities and Linear Programming Set 2	--	Y	Y
15-2-2020	Polynomial Set 3 Polynomial Set 4	Y	Y	Y
15-2-2020	Statistics Set 1 Statistics Set 2	--	Y	Y

# Planning

## Linear and Quadratic Equations Level 2 / Myself

Test Completed

**Start Time:** 2020-02-05 00:00

**End Time:** 2020-05-31 00:00

Submit

Recall

Report

## Plane Geometry and Circle Level 1 / Myself

Test Completed

**Start Time:** 2020-02-09 00:00

**End Time:** 2020-05-31 00:00

Submit

Recall

Report

## Plane Geometry and Circle Level 2 / Myself

Test Completed

Submit



# Results and Findings

- ▶ Participation and Feedback Rates of F.4-F.5 Ss were counted as one item in our Continuous Assessment.
- ▶ 25% of Ss in each form can finish almost 90% or above exercises.
- ▶ Starting from March, teachers conducted the lessons via on-line. The OQB will be for revision purpose, summative assessment after teaching one to two topics.

► Analysis Reports are useful for teachers.

## Further discussion with Ss

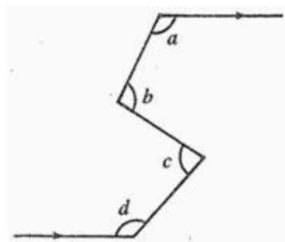
## No need to explain

# Reports and Findings

Question 1 / 15



According to the figure, which of the following must be true?



- ☒ A ☐  $a + b = c + d$
- B ☐  $a + d = b + c$
- C ☐  $a + b + c + d = 360^\circ$
- D ☐  $a + b + c + d = 540^\circ$
- E ☐  $2a + 2b - c - d = 720^\circ$

## Information

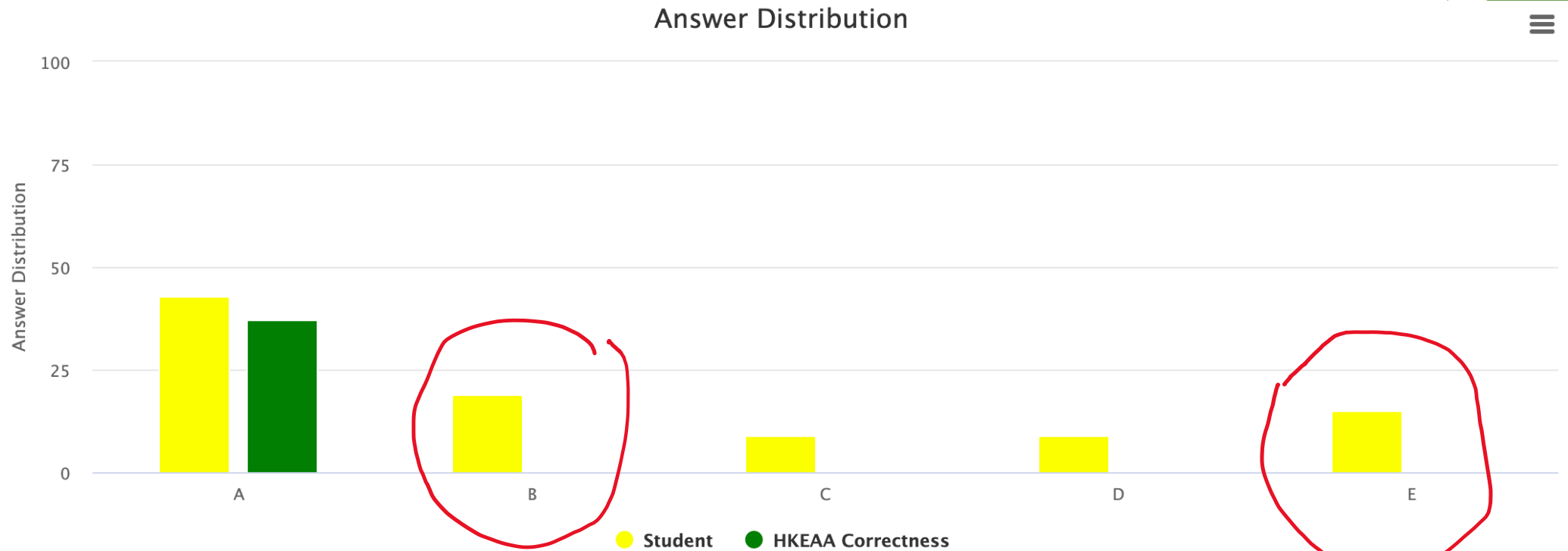
**Author** HKEAA

**Level of Difficulty** Hard

**Topic** Deductive reasoning of geometry, Angles and straight lines, Triangles, Pythagoras' theorem, Quadrilaterals and polygons, Circles, Transformation and symmetry in 2-D figures, Transformation and symmetry in 3-D figures

**Remarks** 1995 No.54

# Reports and Findings



Further discussion with Ss

# Evaluation

- ▶ The OBQ provides a lot of questions can be used as pre-test and post-test.
- ▶ The tests created in this year can be used in this academic year.
- ▶ Modification of award system.
- ▶ In order to promote students self-directed learning, the test created should be finished within half an hour.

# Suggestions from our teachers and students

- ▶ APP installed in mobile device. (Ss need not remember to username and password once installed.)
- ▶ Link/QR code directly to the tests.
- ▶ Automatic Notification(email/SMS) to students or teachers. (3 days before the deadline)
- ▶ Integrate with other electronic learning management platform (e.g. Google Classroom.)
- ▶ Teachers can view all the reports in same subject group.
- ▶ Class/Group comparison reports in one test.

# Suggestions from our teachers and students

## Comparison Report by Class/Group

Correct %	4A	4B	4C	4D	4E
Q.1	56%	67%	70%	34%	80%
Q.2	60%	51%	72%	90%	24%

The background features abstract, overlapping green geometric shapes, primarily triangles and polygons, in various shades of green, creating a modern and dynamic design. The shapes are layered, with some appearing more prominent than others, and they extend from the edges of the frame towards the center.

Thank You!