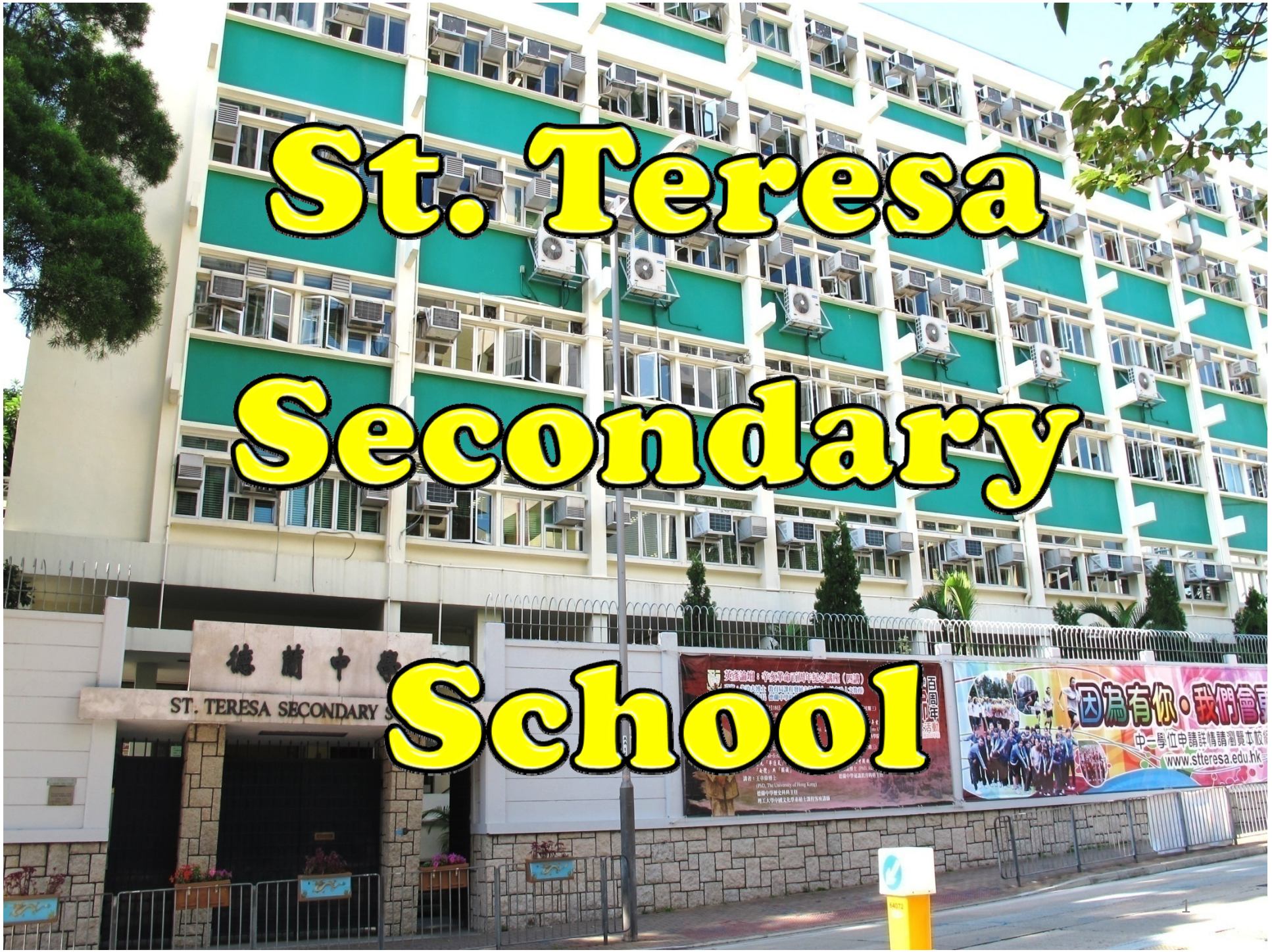

St. Teresa
Secondary
School
ST. TERESA SECONDARY
因為有你，我們會
www.stteresa.edu.hk

School Background

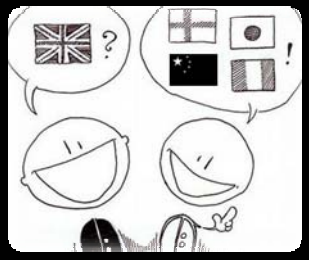
Year founded: 1978
Catholic girls' school
Student enrollment: 1127
CMI school before MOI fine-tuning

Medium of Instruction

Chinese as the major medium of instruction

Smooth transition from junior to senior secondary studies

Expose students to more English, some subjects taught in Eng.

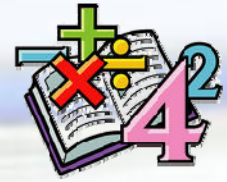


Prepare students for work & study

Fine-tuning of MOI in 2010-2011

Subjects:

Mathematics



Computer Literacy

Integrated Science (Extended Learning Activities)

Reasons for Fine -tuning:

School's Belief

Good Eng. Environment

+

Experienced Qualified Teachers

Students' success in learning using Eng. as MOI

Positive Feedback:

-from teachers & students in senior forms using English as MOI

-from Quality Assurance Inspection Team 2008-09

-both teachers & students could cope well in senior forms

Preparing students for work and study:

If Maths & CL are taught in Eng.,

- -easier to understand
- -facilitate self-learning
- -prepare for work & study

Consensus of stakeholders

Discussed & consensus reached at the 2008-09 meetings of:

- -School Management Board
- -School Executive Committee
- -Academic Committee
- -Advisory Committee
- -PTA
- -Staff

Cross-curricula Collaboration to meet students' study needs since 2008-09:

-English vocab. & phrases taught in context in non-English subjects, except Chin., Chin. Hist. & Putonghua

-part of assessment

Supporting Measures for the Fine-tuning of MOI

Before implementation (2008-10)

Subject Preparation

1. Curriculum

   Maths & Computer Literacy

   -taught Eng. vocab. & its usage in context

   -part of assessment

   -chose suitable textbook for adoption

2. Teachers

-non-English teachers started acquiring the necessary qualifications since 2008

-all S1 Maths teachers fulfilled lang. requirements

-horizontal peer lesson observation

3. Resources

-purchase of teaching resources to develop school-based teaching materials

-purchase of English version computer teaching software

-production of English version teaching aids (charts, diagrams, real objects), worksheets & handouts by TAs


Whole-school
Approach to Creating
an English-rich
Environment

Whole-school Approach to Creating an English-rich Environment

- English speaking days - Topic talk - Morning assembly -School announcements	- Print-rich environment -Spotlight board & Voices board - Canteen and Snack Bar - Campus TV

English speaking days

Chatting with the Principal

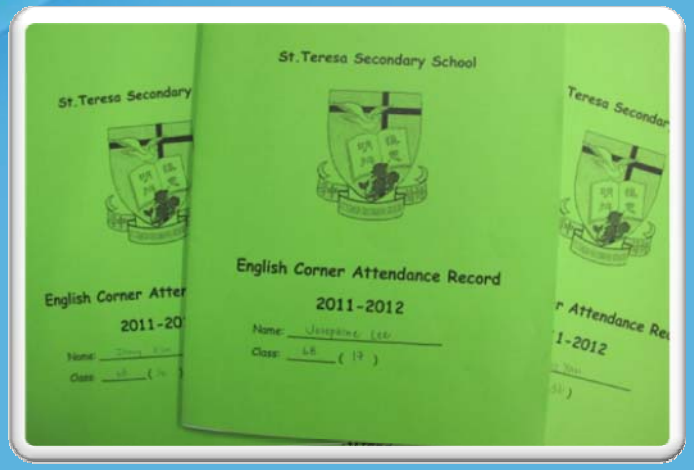
Singing Circle

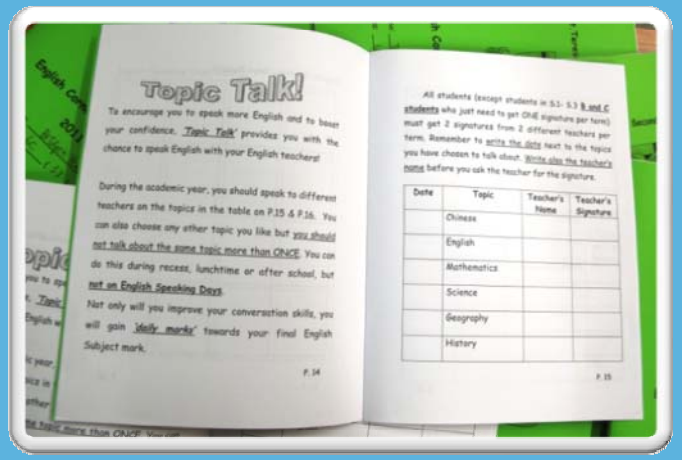
English ambassadors

Other subject teachers

Stickers

Topic talk





Topics to talk about

All teachers

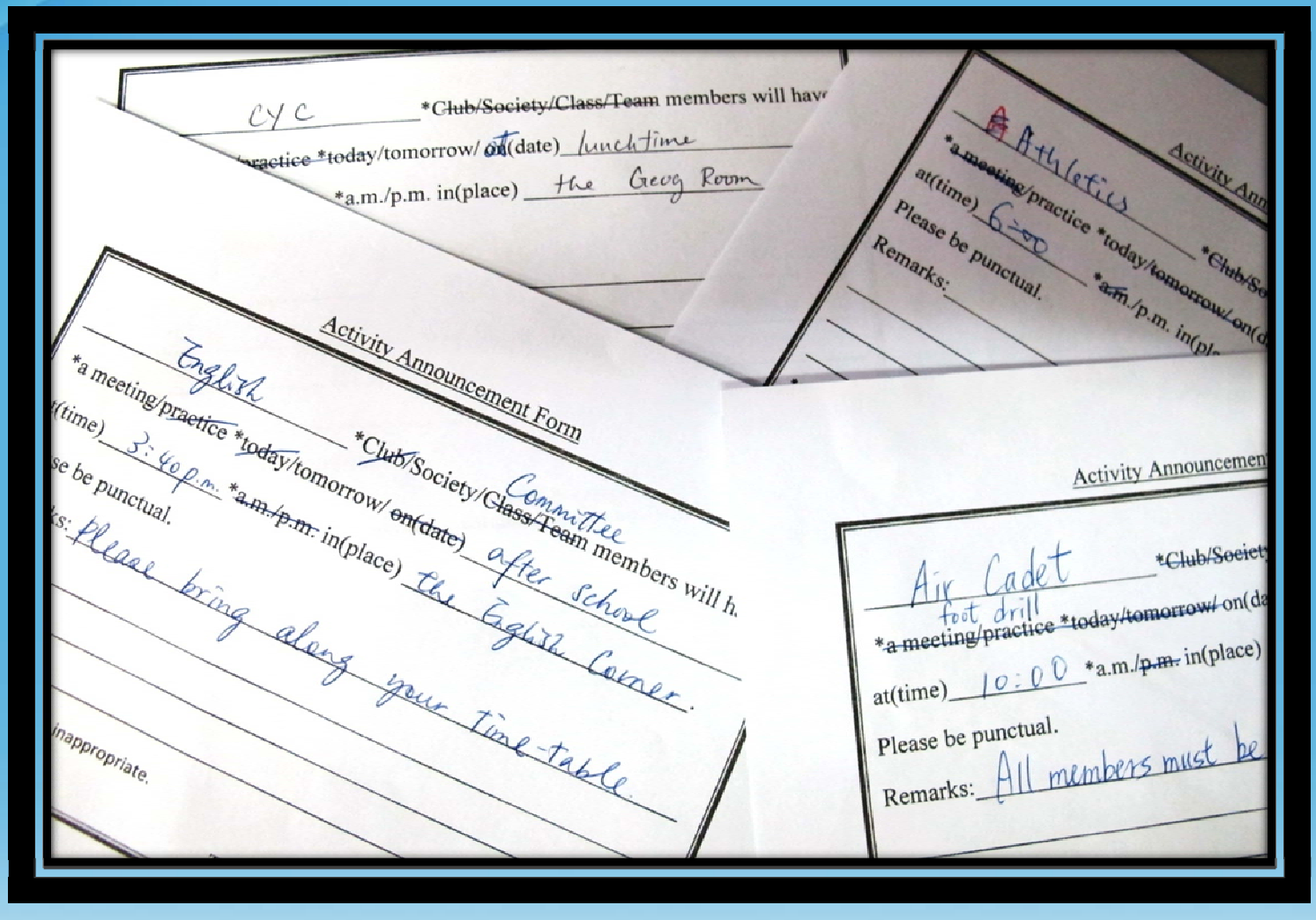
Further suggestions

Morning assembly

Student involvement

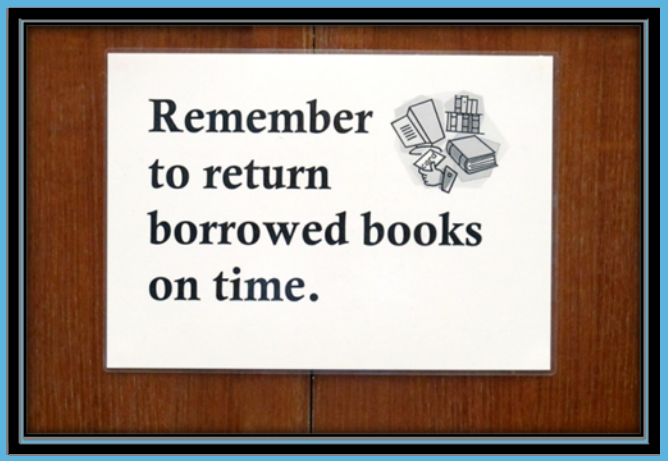
Students conduct assemblies

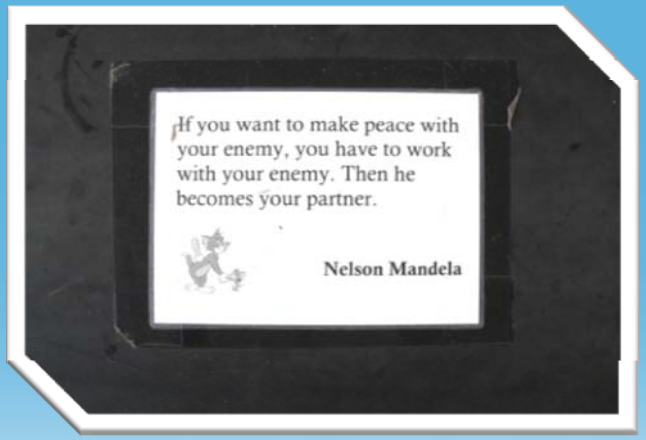
School announcements



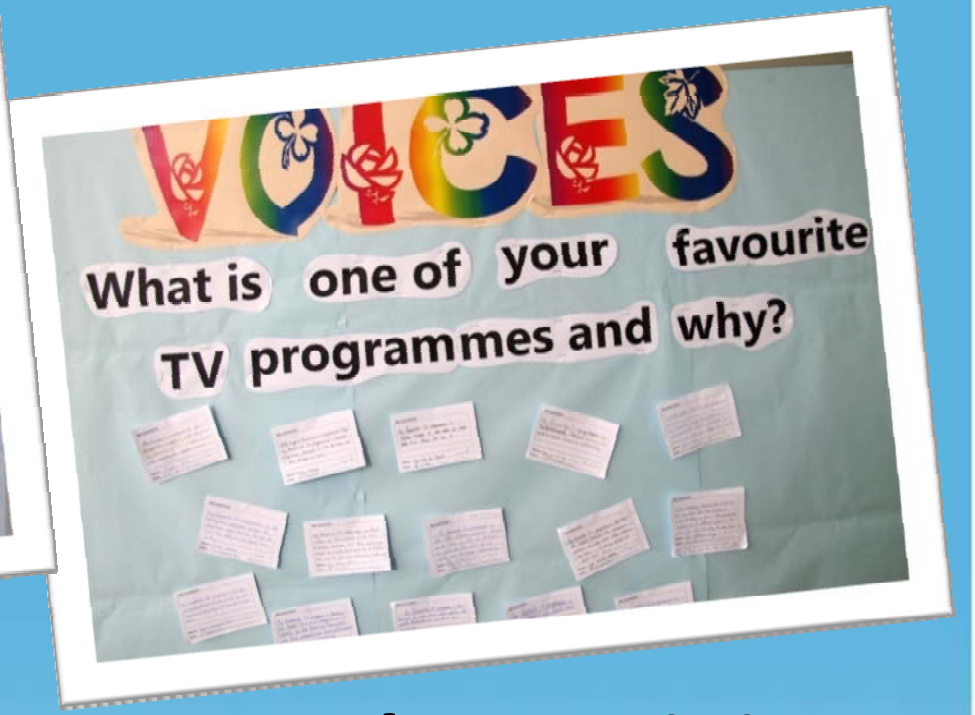
All teachers involved

Print-rich environment





Spotlight and Voices board



Across subjects

Student opinions

Canteen and Snack Bar

Ordering in English

Campus TV

Integrated Science

Computer Literacy

Technology & Living

English reading fortnight

Support from the English Department for Mathematics

1. Curriculum

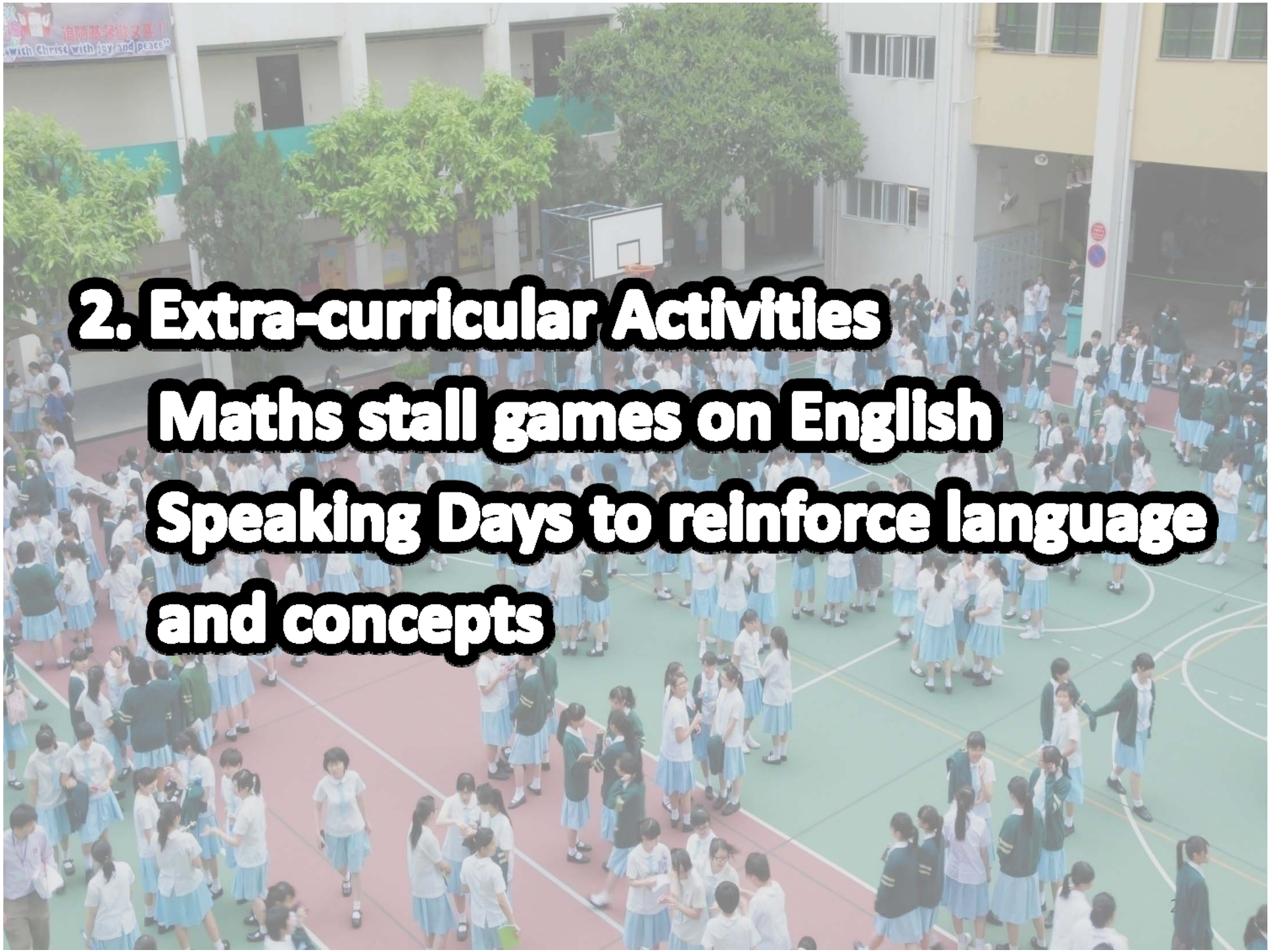
-advise content subject teachers on how to handle the language

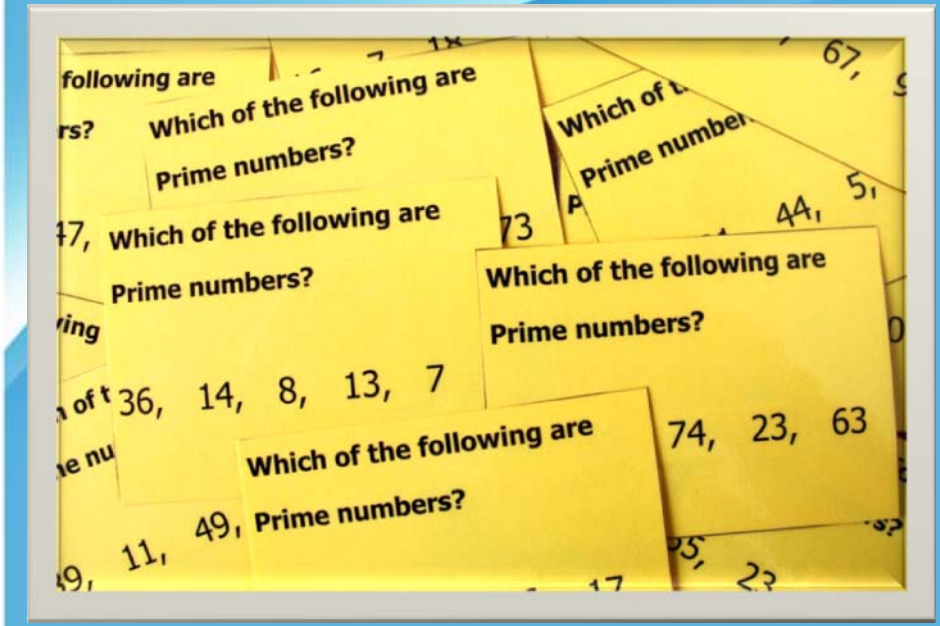
-advise Maths teachers on the design of teaching materials and aids

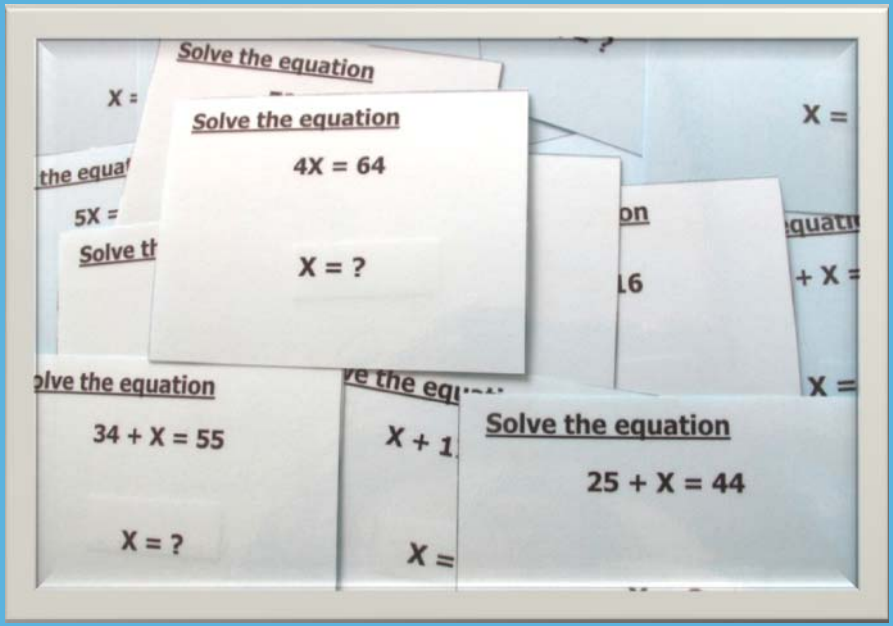
-rearrange the teaching schedule

-integrate Maths elements into Eng. Curriculum

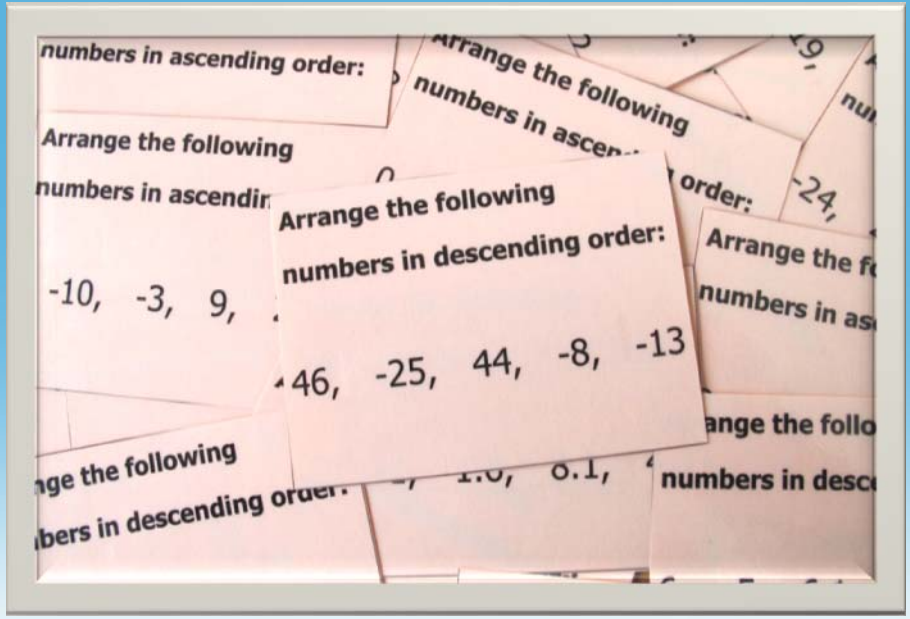
-advise on language use in Maths exam papers

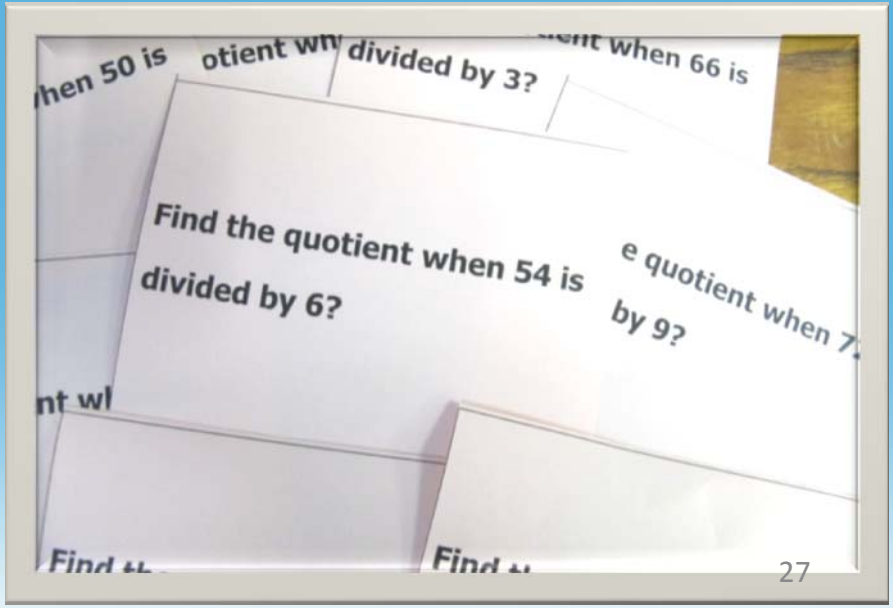

2. Extra-curricular Activities
Maths stall games on English Speaking Days to reinforce language and concepts





Stall games on English speaking day






Which of the following are
Prime numbers?
95, 31, 47, 56, 70

3. Summer Bridging Course

-compulsory for S1 students

-conducted in English

-two weeks to revise primary Maths curriculum & introduce mathematical terms in Term 1

Language Across Curriculum (LAC) Committee

-funding form REES (2011 – 2013)

-members
- 1 consultant
- 1 coordinator
- 2 Eng. Teachers
- 2 Maths teachers + panel head
- 1 Computer teacher + panel head
- 1 I.S. teacher + panel head

-sustainable : trains all teachers in the 3 panels

Collaboration between Maths and English Department

1. Preparing teaching materials

English Teachers

a) Advise on language use in worksheets

b) suggest easier sentence structures to help students

   i) students from remedial classes

ii) share common problems that students have when they learn English

- Difficult to read
- Lost interest in subject

iii) work out solutions together to address the problems

Example of Modified questions

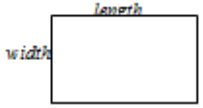
- Original question from worksheet:
  - George has 125 stamps and **some souvenir sheets with 6 stamps on each sheet.** If George has 173 stamps altogether, how many souvenir sheets does he have?
- Rephrased question:
  - *George has 125 stamps and **some souvenir sheets. On each souvenir sheet, there are 6 stamps.** If George has 173 stamps altogether, how many souvenir sheets does he have?*

How to improve worksheets

- Add attractive clip art
- Use bigger fonts
- Better layout of worksheets

Original worksheet VS Amended worksheet

1. The width of a photo is y cm while the length is 2 cm more than the width. Given that the length of this photo is 20 cm



2. Bobby weighs 3kg less than half of Luke's weight. If Luke weighs *y* kg, then Bobby weighs 54 kg.

3. John has 3 more pens than David. Altogether they have 27 pens. How many pens does David have?

4. Three sets of marbles are put into a box and 4 more marbles are later added into the box.. There are 40 marbles in a box. How many marbles are there in one set?

5. The perimeter (周界)of a rectangle is 30cm. It is known that the length of it is 3cm longer than that of width. Find the length of the rectangle.

6. In a supermarket, a lemon is $1 more expensive than an orange. Given that the price for 5 oranges is $10, find the price for 1 lemon.

Application of linear equations in one unknown.

1 The width of a photo is y cm while the length is 2 cm more than the width. Given that the length of this photo is 20 cm. Find y cm.

Bigger font size

2. Bobby weighs 3kg less than Luke's weight. If Luke weighs *y* kg, then Bobby weighs 54 kg. Find *y* kg.

3. John has 3 more pens than David. Altogether they have 27 pens. How many pens does David have?

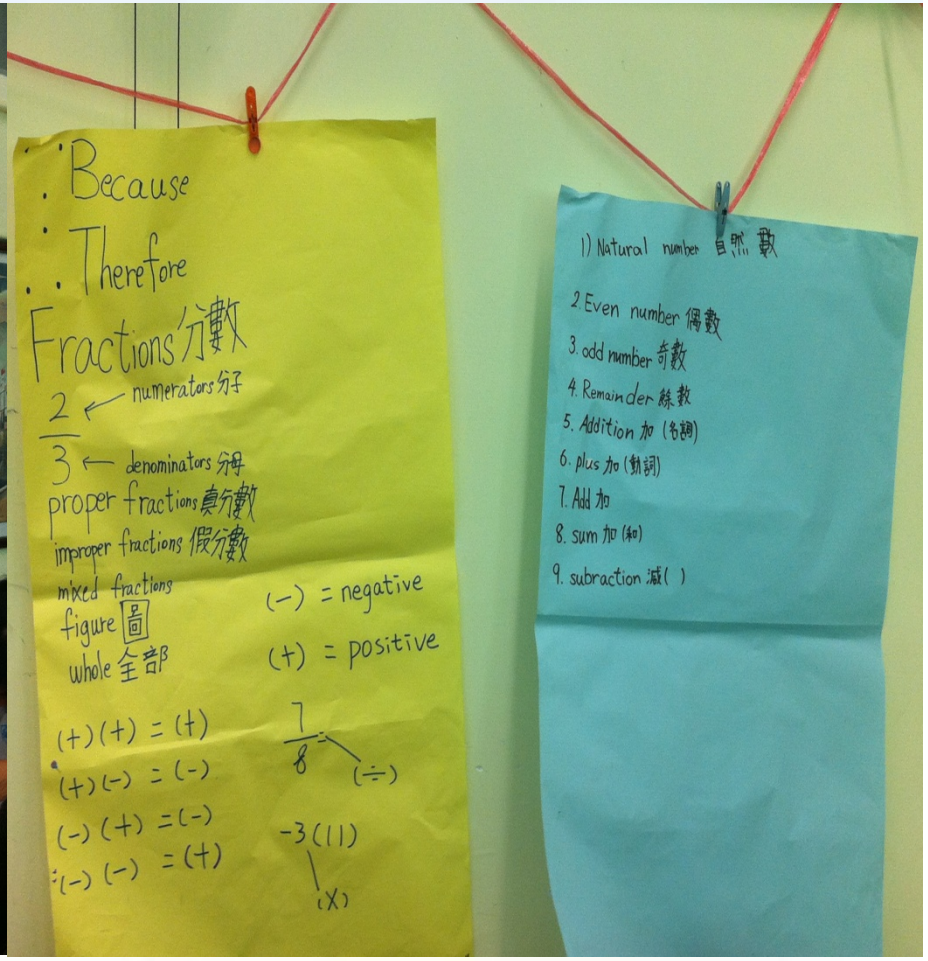
Attractive clip art

4. Three sets of marbles are put into a box and 4 more marbles are later added into the box.. There are 40 marbles in a box. How many marbles are there in one set?

2. Create an English learning environment

- Posters with new vocabulary are put up in the classroom
  - A list of vocabulary is chosen from every chapter
  - Students write the vocabulary on a large poster and hang it up in the classroom
  - A new poster is made for each topic

Example of posters with new vocabulary



How students learn Mathematics in English

Background of students

- F.1 girls
- 16 students in class
- Average Mathematics level
- Below average English level
- Eager to answer questions

How students learn Mathematics in English

- Topic
  - Congruence and Similarity
    - Properties of similar triangles
- Video 1: Introduce the new concept
- Video 2: Consolidate the knowledge by working on different problems
- Video 3: Conclusion

Important parts in Video 1

- Defining that the corresponding angles are equal in similar figure
- Teaching aids such as PowerPoint and animation are used
  - to help students understand the newly learnt concept
  - to visualize some complex concepts to students

Video 1

- Teacher keeps repeating words such as “overlap”, “size”, “the same”
  - help students understand the concept that “corresponding angles are equal”
- With the help of animation, different pairs of corresponding angles are clearly shown
- Students can ***visually*** observe the relationship between the corresponding angles

Important parts in Video 2

- Teacher interacts with students in simple English to ensure effective communication
- Some stronger students keep dominating and answering the questions
- Teacher invites those weaker students to answer questions
- Teacher challenges students' answer
- Different questioning skills are used to assist students if they can't give an answer

Video 2

- Problem-solving session
- Encourage weaker students or inactive students to answer
  - May remain silence due to language proficiency
- Ask follow-up questions
  - Make sure they understand the concept clearly
- Use different questioning techniques, or rephrase questions → simple English
  - Students may understand the question and be able to answer

Important parts in Video 3

- Reinforces students' concepts by revising and saying them out together with the students

Video 3

- Revise all the learnt concepts
  - As a conclusion
  - Reinforce their learnt knowledge
- Saying it out loud with students
  - Consolidate their knowledge

Difficulties

1. Weaker classes / Remedial classes
   - Lower English level
   - More time is needed to explain concepts

2. Word problems
   - Difficulties in understanding word problems
   - Collaboration with the English Department
   - Learn some sentence patterns in advance
     - Comparison of adjectives, conditional sentences or passive voice

Difficulties

3. Abstract Concepts
   - Difficult to explain to students in English

4. Teaching schedule
   - Progress slower than expected
   - Especially in remedial classes or classes with Special Educational Needs (SEN) students

Factors for Successful Cross-curricular Collaboration

-mutual trust

-team work

-collaborative culture

-school's support

-additional resources

Difficulties encountered in the Collaboration

-time constraint

-teachers' mindset & cooperation

Thank Y