Flipped Classroom - An Alternative Approach to Enhance the Effectiveness of Learning and Teaching in Primary Schools

HKU e-Learning Development Laboratory

Course Coordinator: Dr. Wilton Fok

Course Designer: Mr. Ha Chi Hung

Instructors: Mr. Chow Yan Lok, Mr. Lee Chi Shing, Mr. Sung Po Wah

Session 2 Schedule

	Topic
2.1	Using Interactive Whiteboard Apps and Smartphones to Create Lesson Videos
2.2	Uploading Videos to YouTube
2.3	Logging in iClass, Adding Course, Distributing Course Code
2.4	Embedding Videos in iClass, setting questions and designing pre-learning activities
2.5	Strategies of Re-designing Day-time Lesson Pedagogies and Activities (Brainstorming)
2.6	Discussion on Common Pitfalls when ‘Flipping the Classroom’
2.7	Conclusion, Q&A

2.1 Using Interactive Whiteboard Apps and Smartphones to Create Lesson Videos

Free Apps

Paid App

Showme

Educreations

Doceri

ScreenChomp

Explain Everything

Comparison

Showme

Educreations

Doceri

connect with laptop

ScreenChomp

single page only

Explain Everything

Dozen of import and export functions

multiple pages
lessons accessible on official website
teacher community
In-app purchase

Strategy

If there is a free app substitute,
then use free app.

If not, use paid app.

Screencast Apps vs Screencast-o-matic

Write directly on screen

More intuitive

Better handwriting and annotations

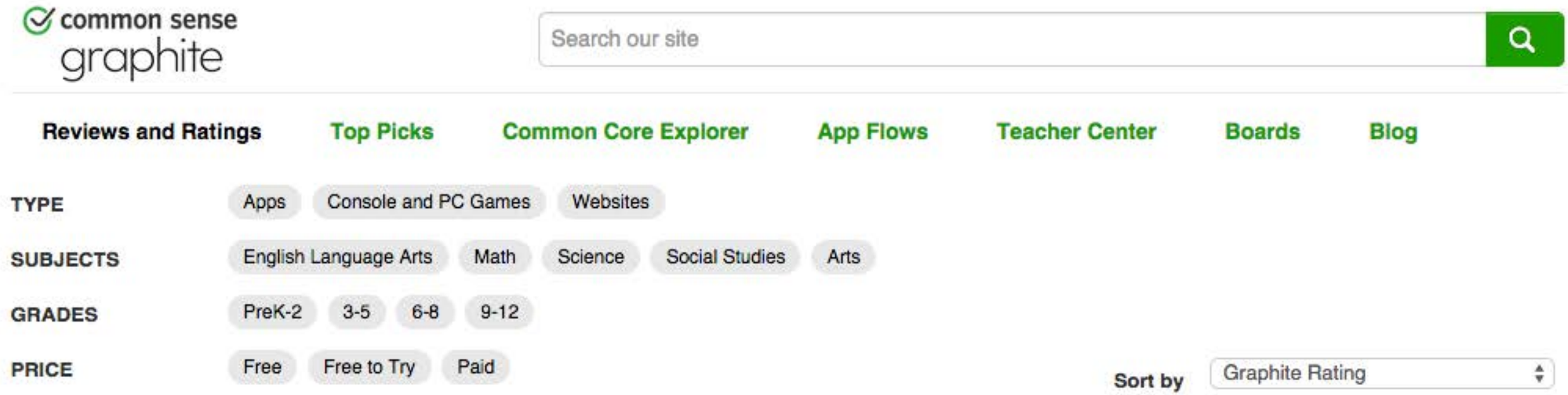
How to look for useful apps?

Google: interactive whiteboard apps

Google: best apps for teachers / students / classrooms

Google: must-have apps for classrooms

How to review educational apps



https://www.graphite.org/reviews

Explain Everything

Powerhouse tool for creating stellar multimedia presentations

LEARNING RATING VERY GOOD

TEACHER RATING BEST

(62 Teacher Reviews)

Price: Paid, $2.99

Grades: 7-12

Platforms: Android, iPad

Add a Field Note

Add to a Board

TEACHERS USING EXPLAIN EVERYTHING

I Don't Use This

"Smartboad technology without the cost"
- Kathryn R.

"An excellent tool for students to demonstrate what they know."
- Marcie Hebert

"Explain Everything should be installed on every iPad in schools today."
- Dan C.

"I think this is a great app for students to share their learnings and teach others."
- Mariette Martineau

Read 62 Teacher Reviews

QUICK TAKE

Pros:
Students can import content to use in their presentations from multiple sources.

Cons:
Kids who don't yet have a good grasp on the core concepts for what makes a good presentation may not use this powerful tool effectively.

Bottom Line:
Teachers and students can make presentations with content from multiple sources on this innovative, fun app.

LEARNING SCORES

Engagement
Using social media and other content that can be imported from a variety of sources or created right in the app, *Explain Everything* helps kids learn by making presentation creation fun.

Pedagogy
Explain Everything empowers kids to create presentations, lessons, tutorials, and more with this highly adaptable tool. They're learning about digital creation in one of the best ways: by doing it.

Support
Kids will learn to use the many features on this app via a clear, detailed tutorial/help section and in-app prompts.

Stylus or not stylus

Free “stylus”

always available
less accurate

Inexpensive stylus

less strain
acceptable accuracy

Active stylus

expensive
more accurate

Built-in wrist guard

Apple Pencil Fantastic!

Wrist guard

Slide 1 of 1

0:00:00

Going for iPad Pro?

小畫家

PowerPoint

Template change

01 of 02

02 of 02

Slide 2 of 2

剪片

00:00:00

交片

Beginner's Tip

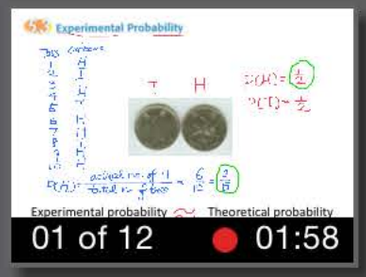
Think - Record - Pause

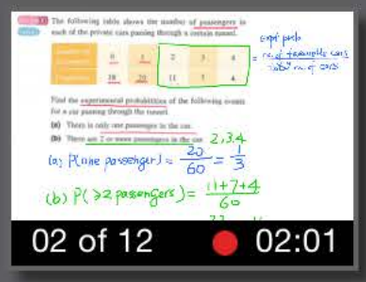
Slides Manipulation

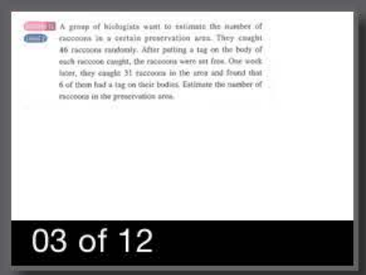
Add / delete / duplicate slides

5.3 Experimental Probability

Template change







T H

$P(H) = \frac{1}{2}$

$P(T) = \frac{1}{2}$

$\frac{\text{actual no. of H}}{\text{total no. of toss}} = \frac{6}{10} = \frac{3}{6}$

Experimental probability ≈ Theoretical probability

if toss ↑, expt prob close to theo prob.

Slide 1 of 12

00:01:58

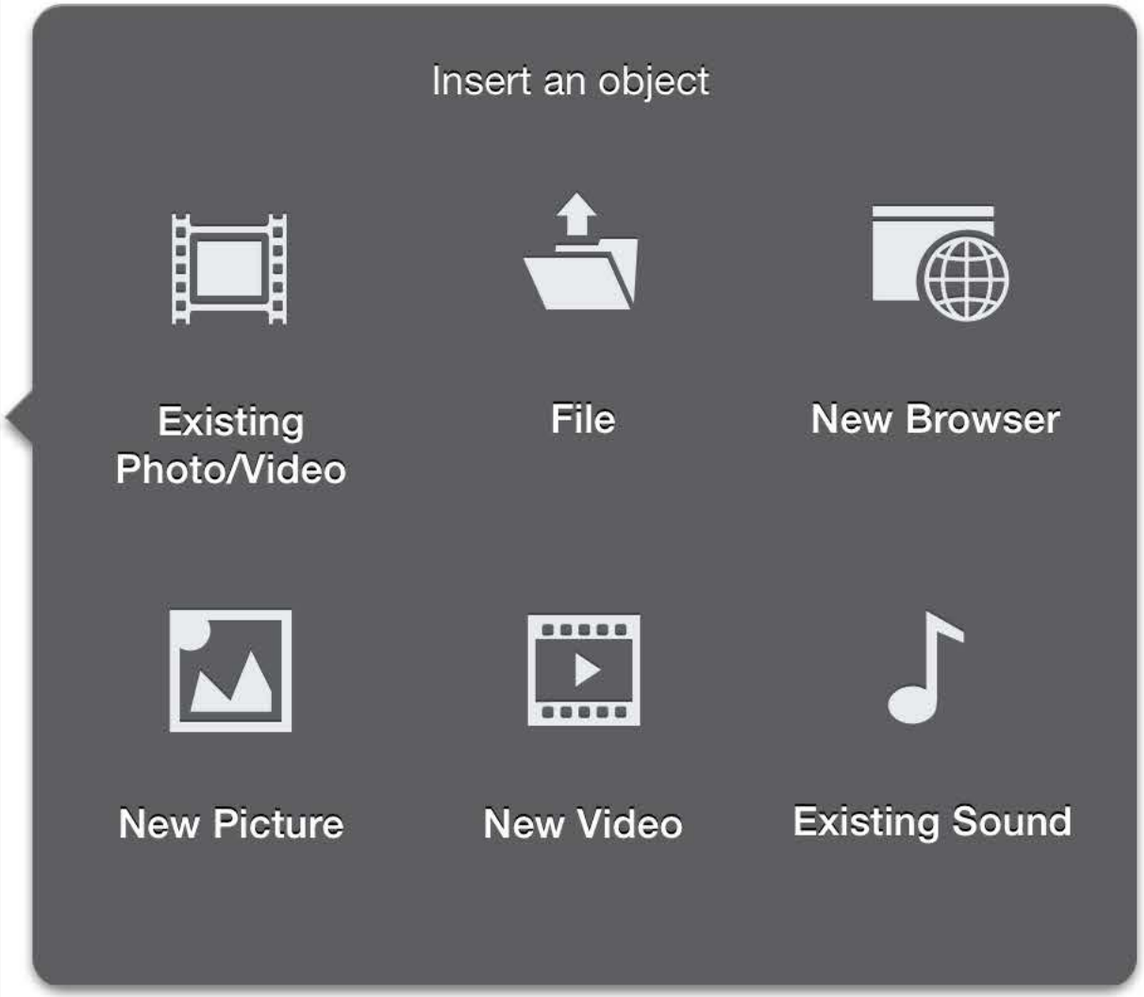
Objects Manipulation

text / shapes / objects

move, rotate, resize objects

embed webpage

Insert drawing objects



Insert objects

Insert photos or videos

Importing on-the-fly

Annotations on photos / videos

Task: Create a 3-minute lesson video

If possible, try to talk and write at the same time.

Insert photos, drawings or even videos.

Use annotations, pointers to help your explanation.

Pointers

Versatile File Import

Photos

Dropbox

GDrive

iTunes

WebDAV

Box

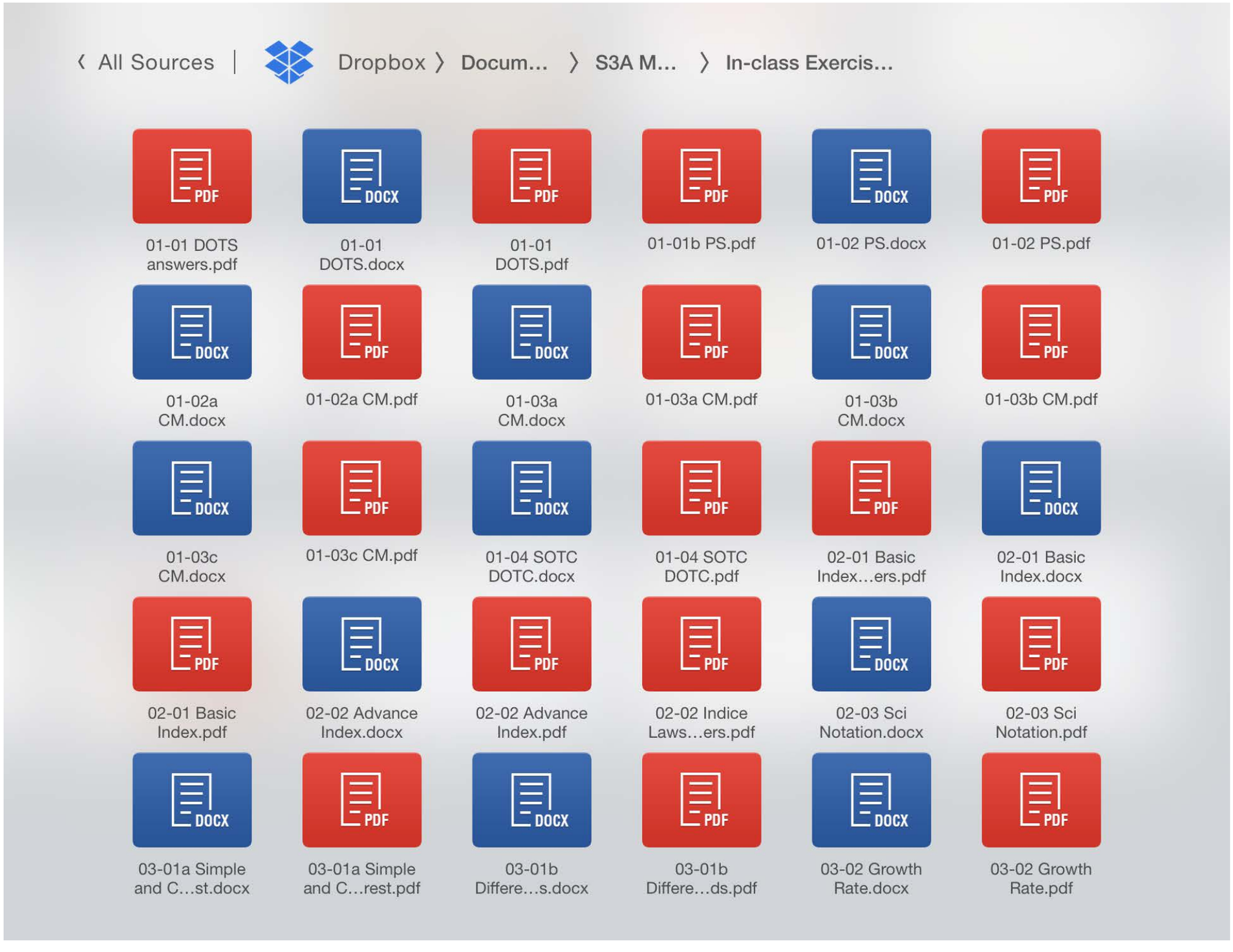
OneDrive

Evernote

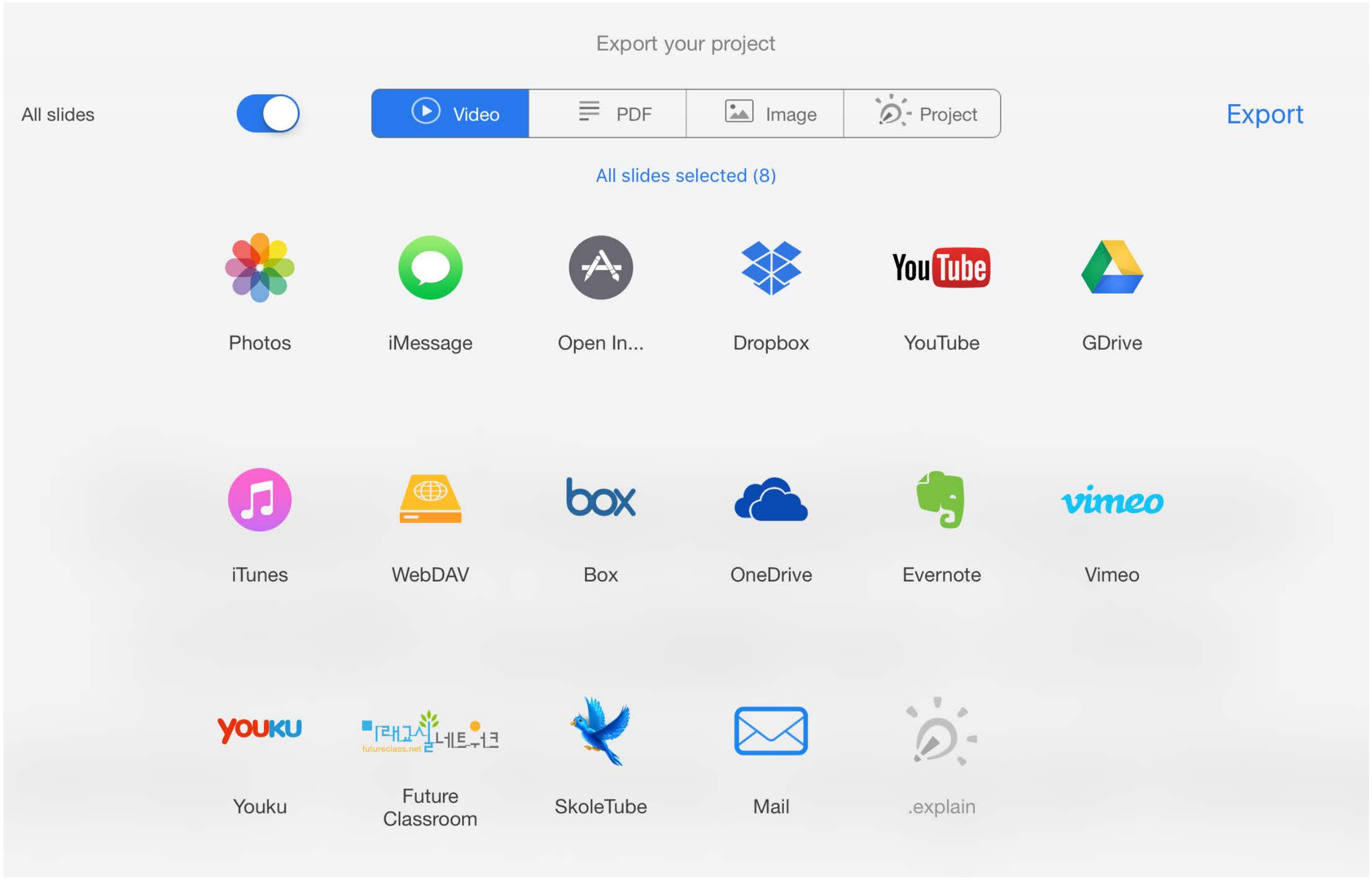
Future Classroom

SkoleTube

We don’t have to do everything from scratch



Versatile Video Export



Setting accounts

Explain Everything

Settings

General | Export | Record | Accounts

Dropbox

Evernote

box

Google Drive

YouTube

vimeo

Facebook

Twitter

WebDAV

youku 优酷 .com

Backups
16 August, 2014

Cube sy
27 February, 2014

Me
7 M

Tetrahedron symmetry
27 February, 2014

test
9 July, 2014 00:00:22

ha
23

maths 2014 ans
9 May, 2014 00:00:06

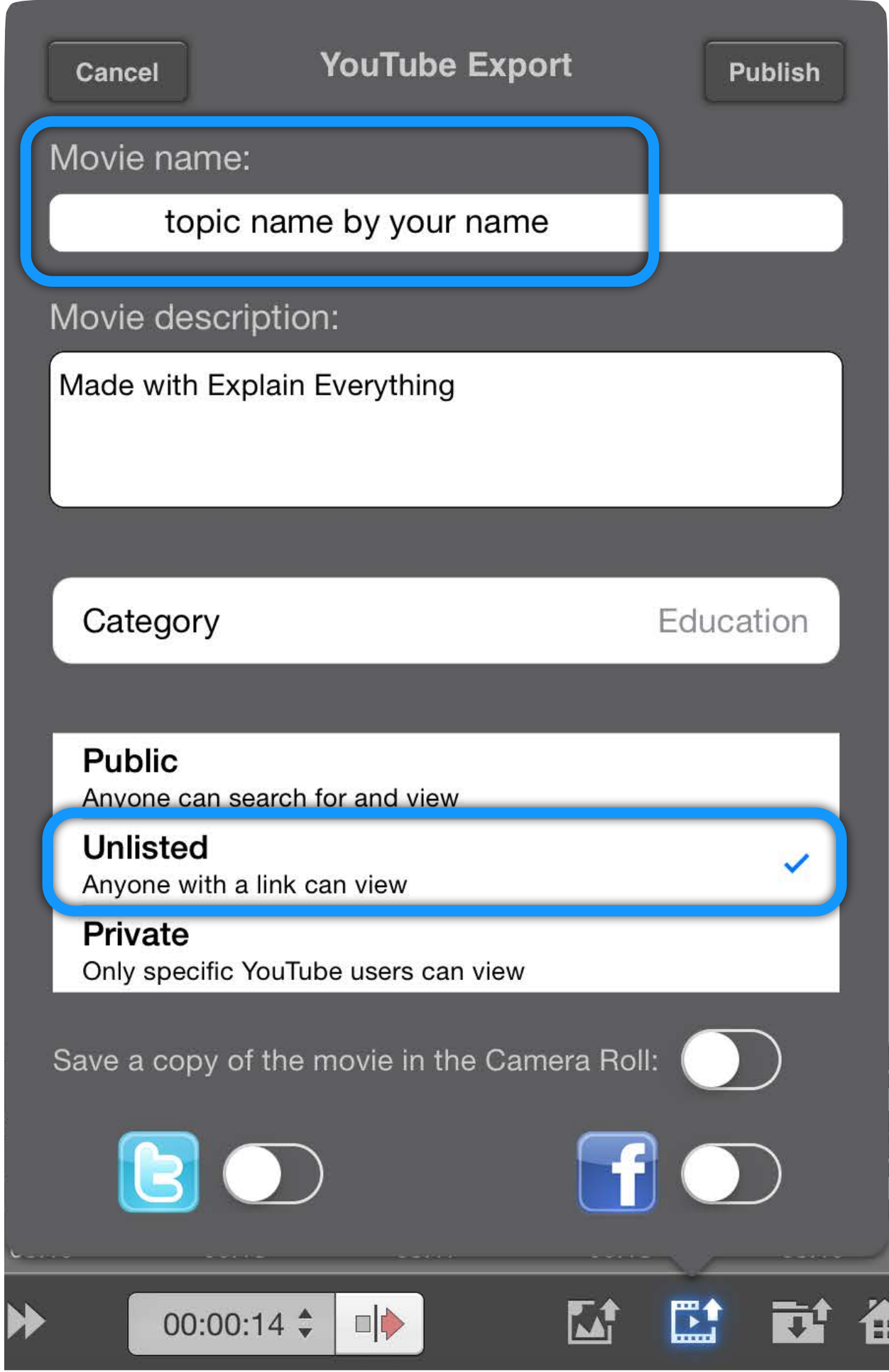
3B 35
29 April, 2014 00:00:49

3B
29

Video Upload Settings

<topic name> by <your name>

Privacy: Unlisted



Tryout import function

Upload a file to your Dropbox / Google Drive

e.g. PowerPoint file with several slides (recommend to save as PDF first)

Import the file into Explain Everything

Create a micro-lesson using Explain Everything

- video length should not be more than 3 mins
- if possible, talk and write at the same time

Alternative Smartphone holder

Strengths

Very natural and mimic personal tutoring experience

Intuitive, paper and pencil

Can talk and write faster

Very lost cost setup and short learning time

Weaknesses

Not too environmental friendly

Undo mistakes are difficult or need further video editing

Need some time to setup, lighting, levelling, aligning

2.2 Uploading Videos to YouTube

Upload and Share Videos

Publish your video to YouTube.

Video name: Level, subject, topic

Set video privacy to “unlisted”.

YouTube video privacy

Public 公開	Unlisted 非公開	Private 私人
Anyone can search for and view	Only people with link can view	Only you and selected users can view

If you have

YouTube Channel

Upload your lesson video

If you have

Google Account

Login YouTube

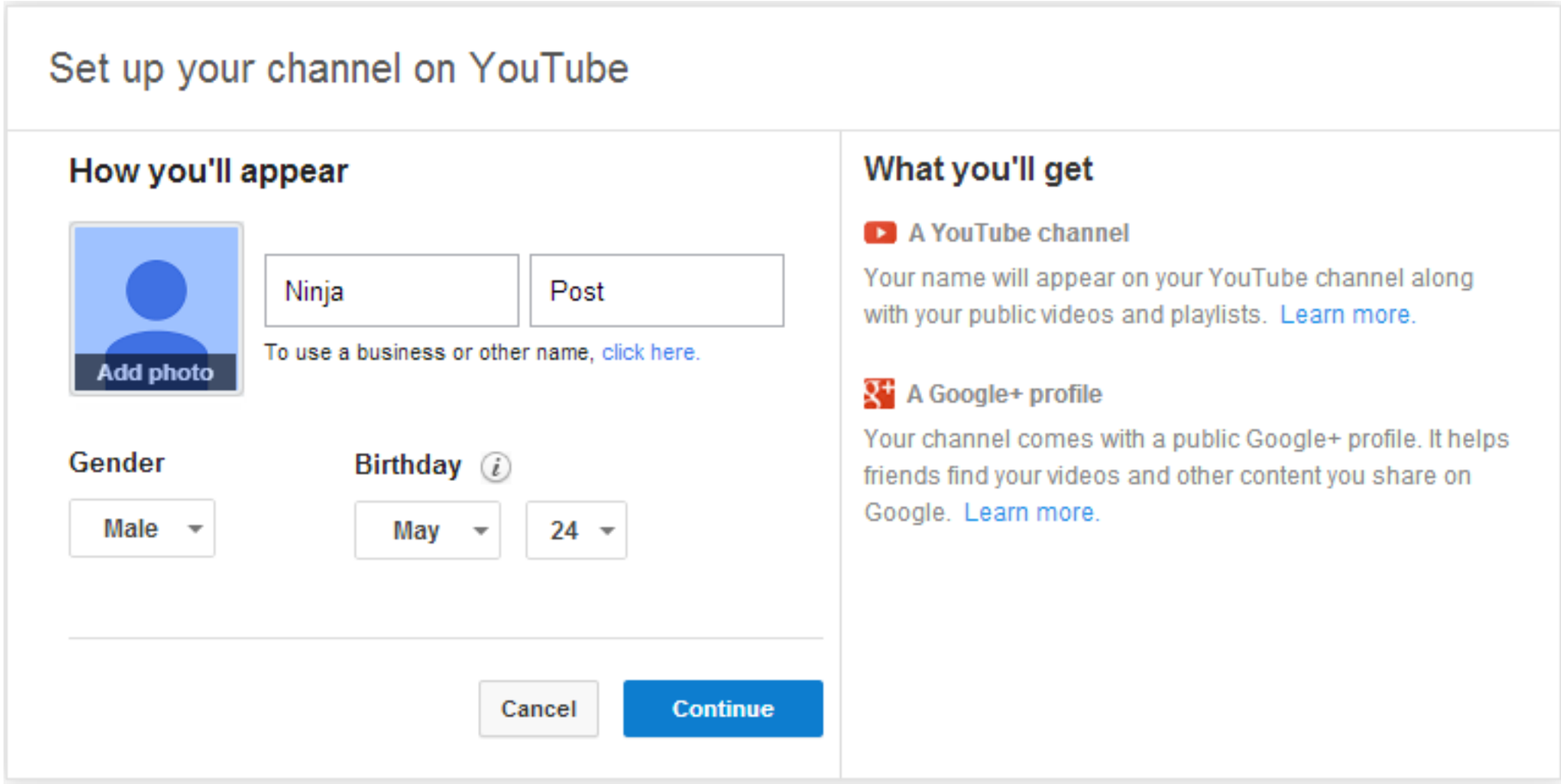
Create YouTube your Channel

If you don't have

Google Account

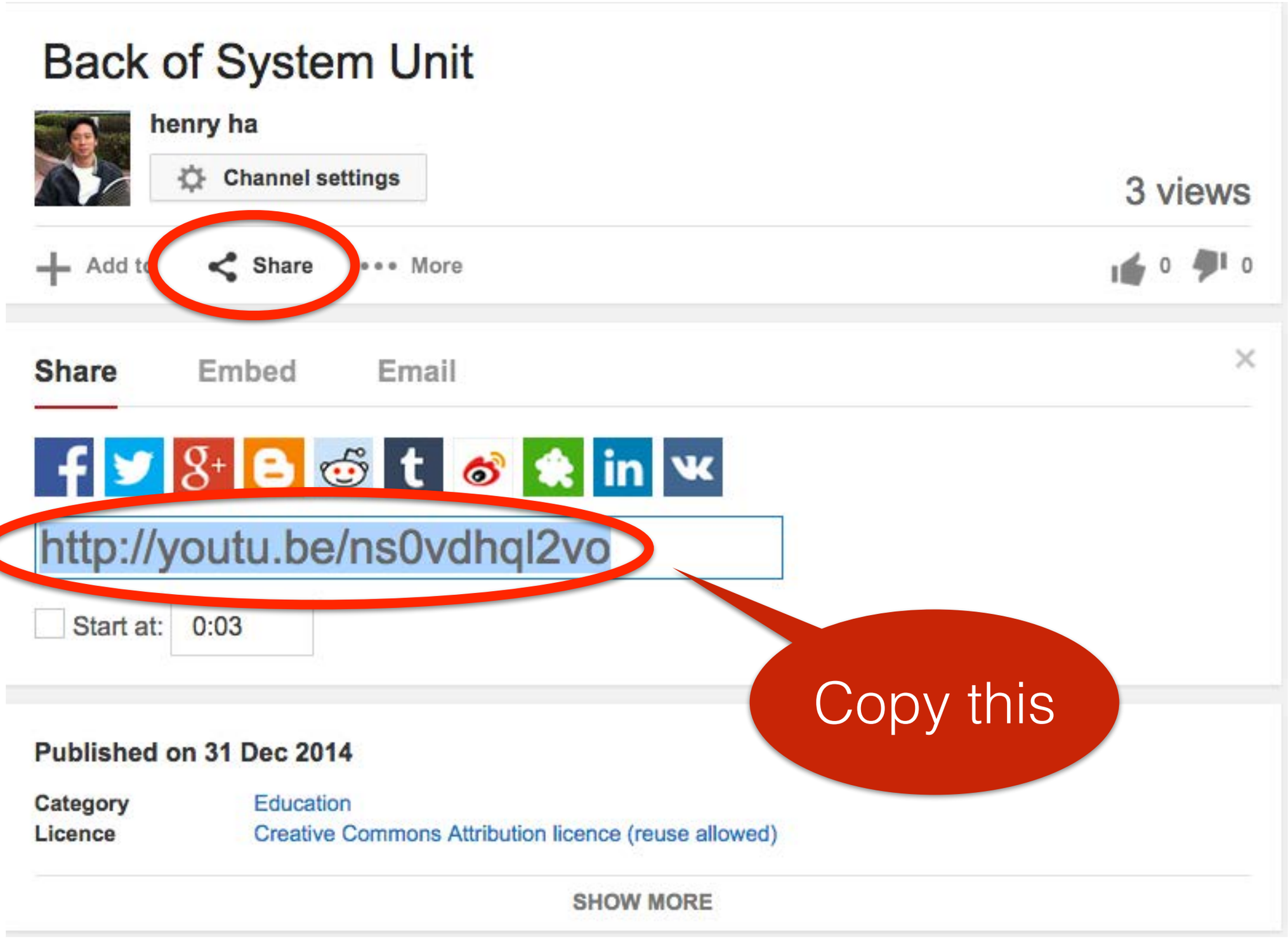
Create Google your Account

Create your own YouTube channel



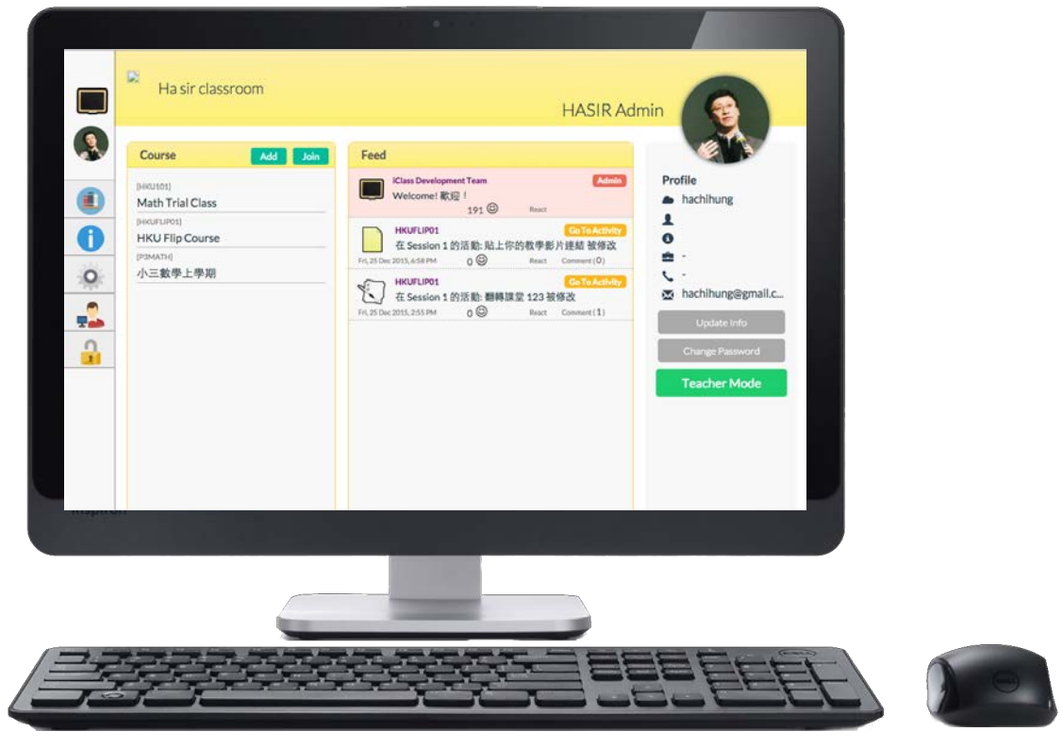
If you have a Google account, sign in YouTube and go to create a channel.

Sharing your YouTube video link

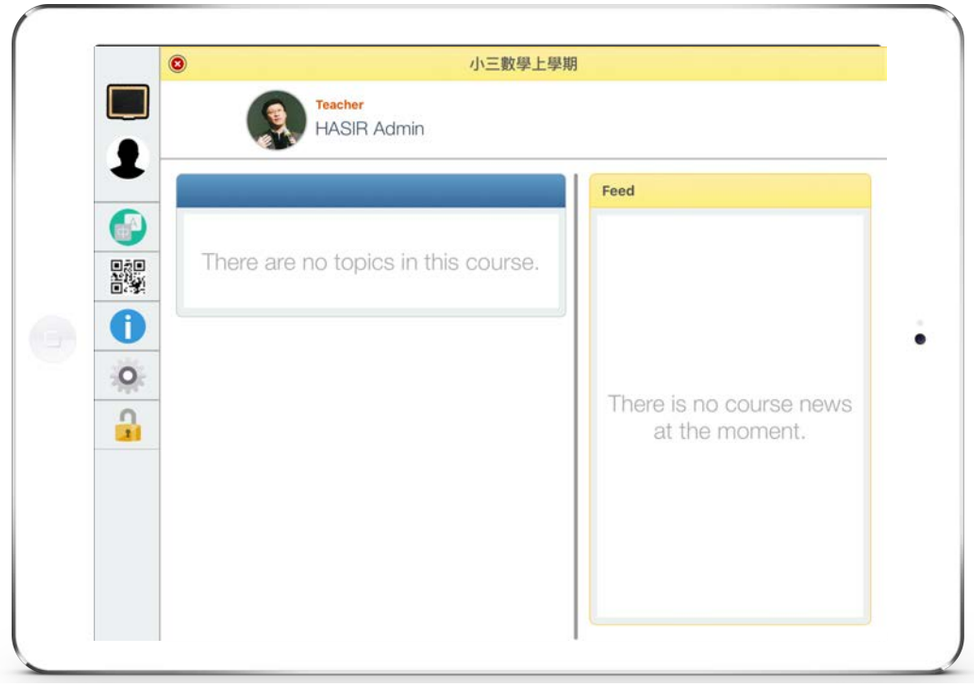


2.3 Logging in iClass, Adding Course, Distributing Course Code

Roles of Desktop and iPad

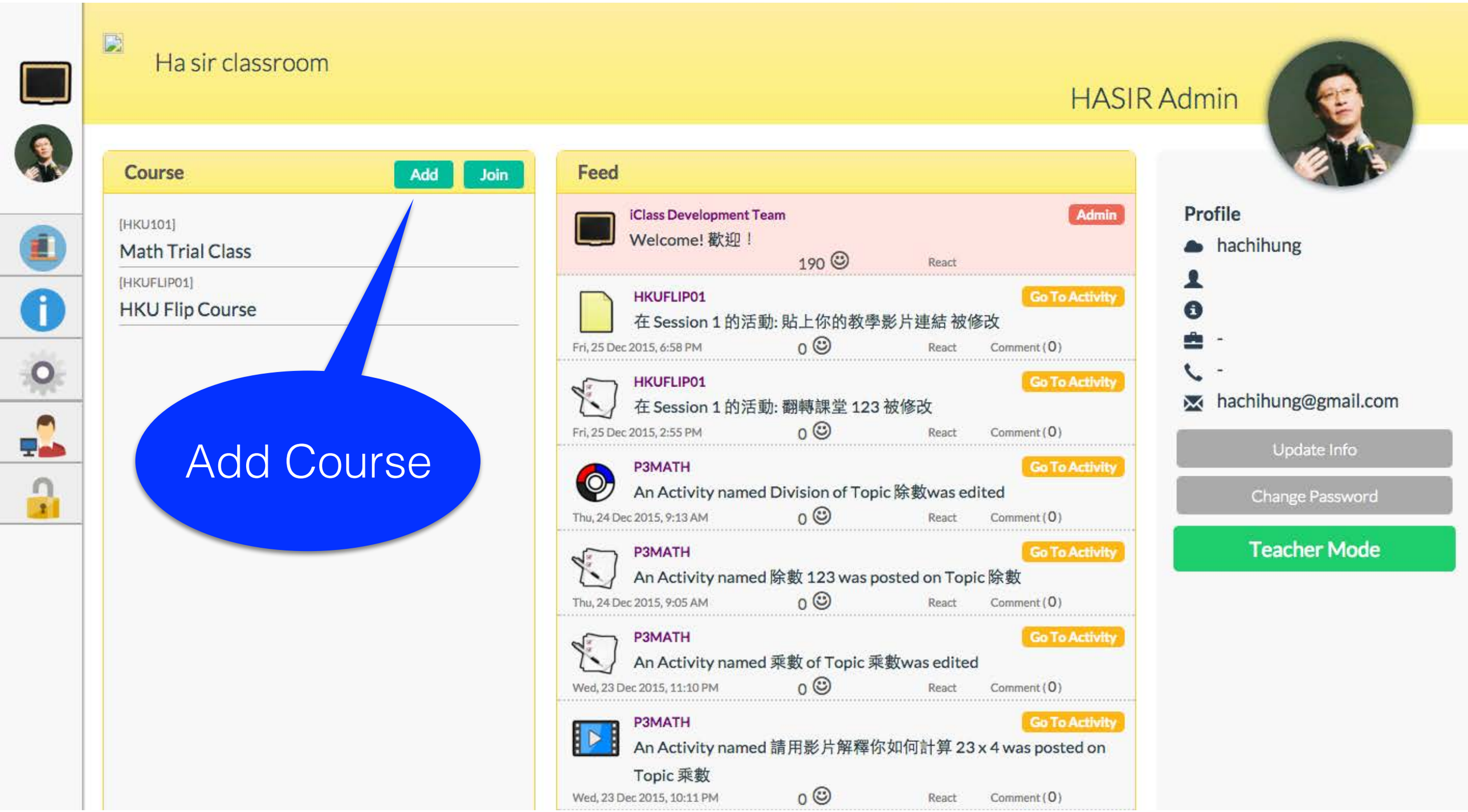


Teacher iClass Account (Admin)

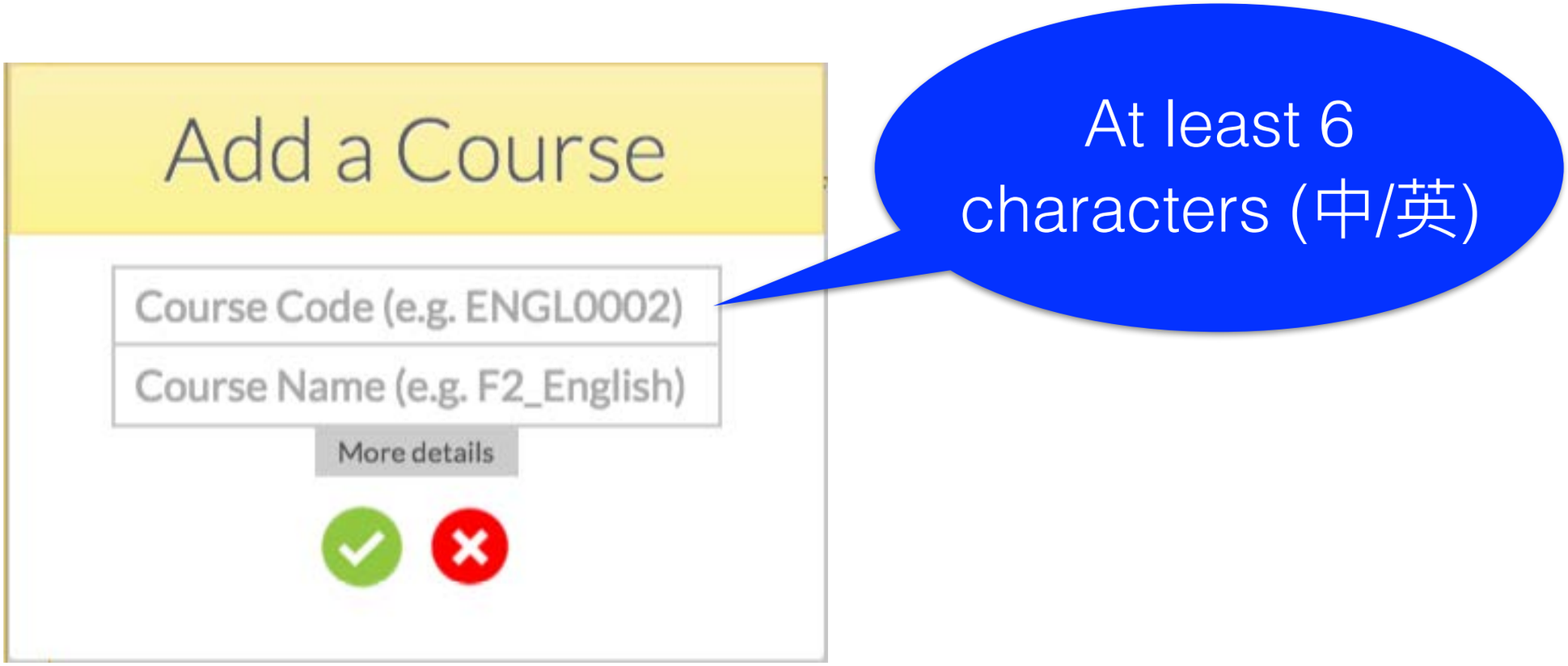


Student iClass Account (Engage)

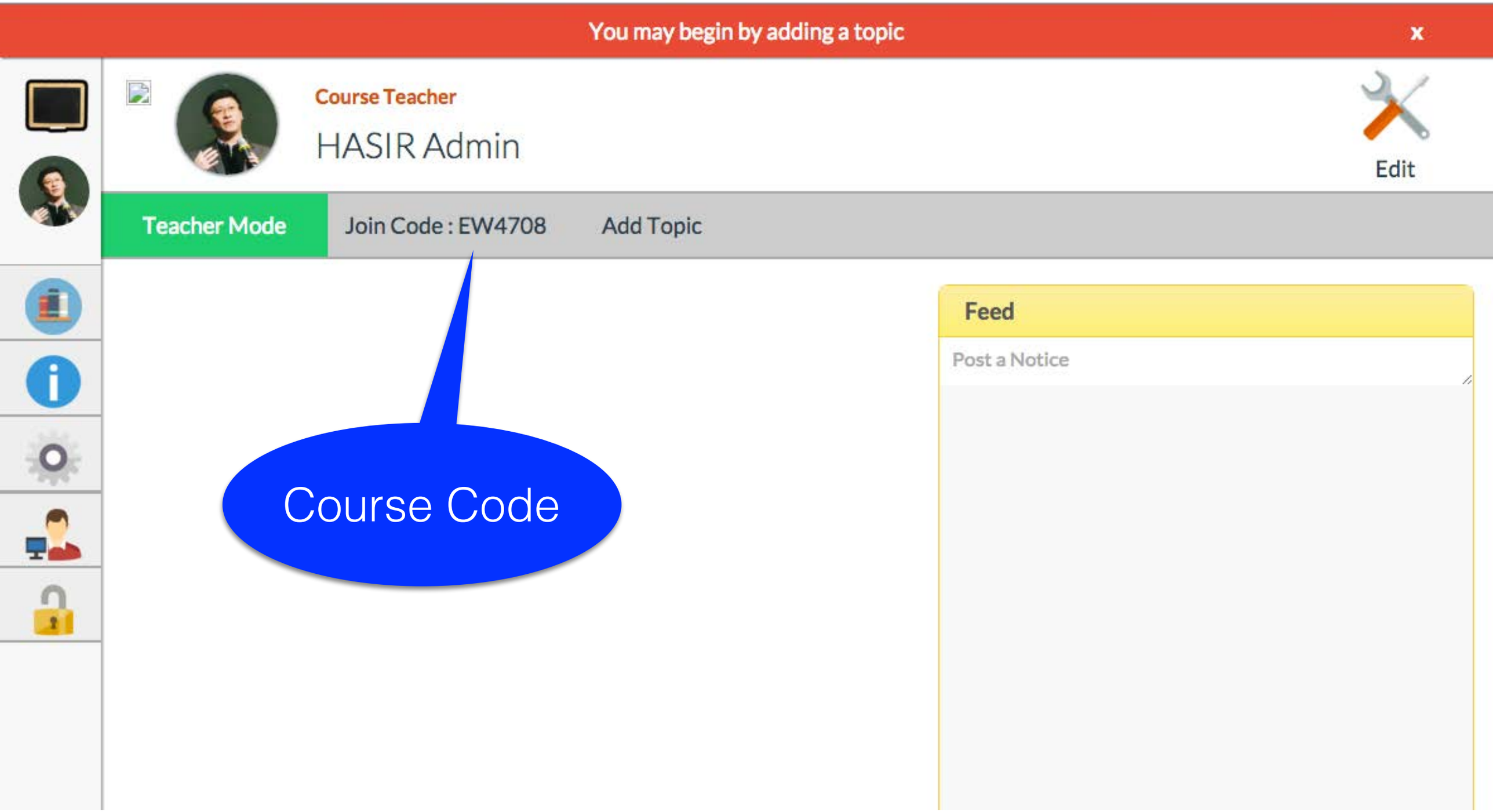
portal.iclass.hk



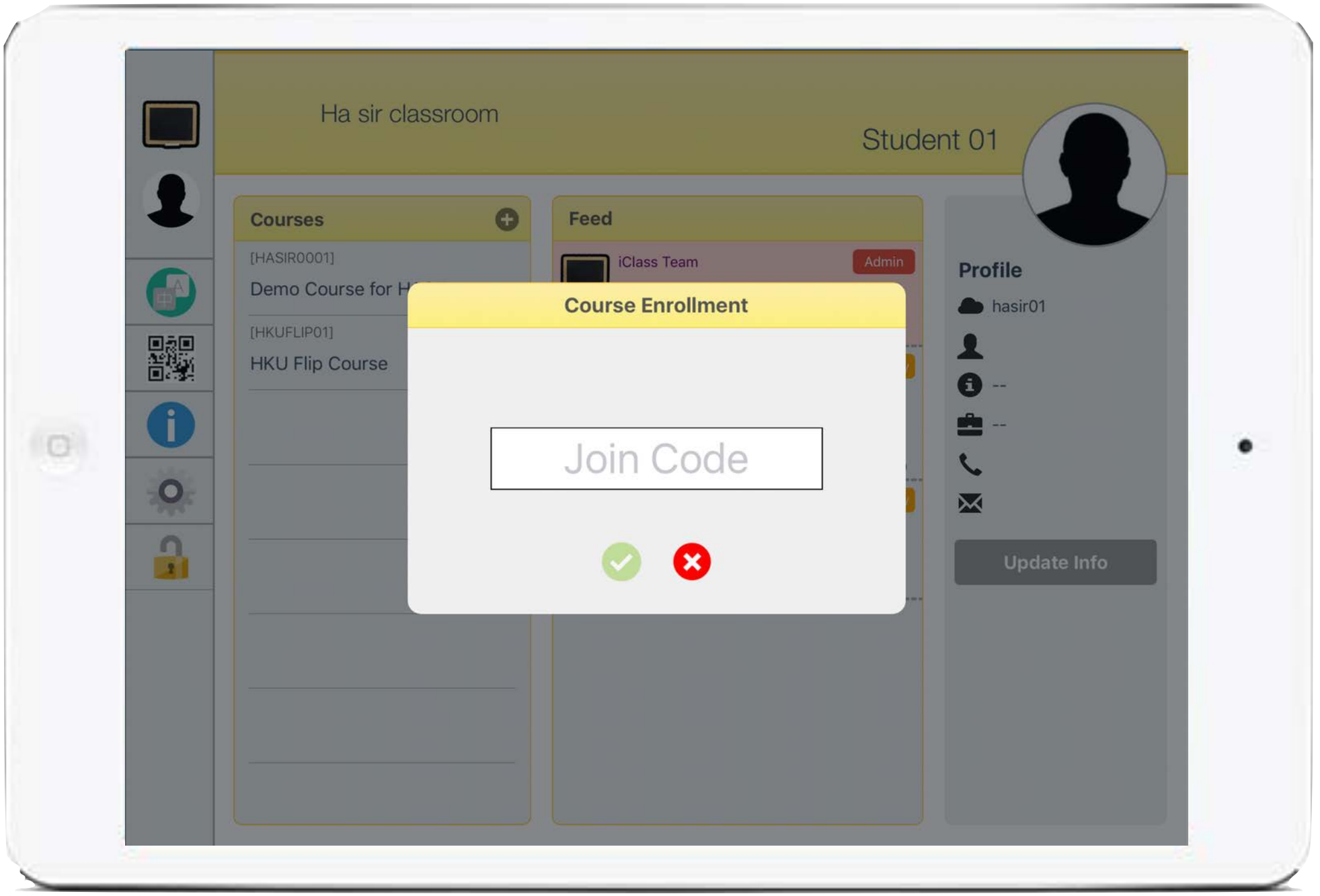
Add Course


Add a Course
Course Code (e.g. ENGL0002)
Course Name (e.g. F2_English)
More details
At least 6 characters (中/英)

Course Code


You may begin by adding a topic
x
Course Teacher
HASIR Admin
Edit
Teacher Mode
Join Code : EW4708
Add Topic
Feed
Post a Notice
Course Code

On iPad, join course using a student account



2.4 Embedding Videos in iClass, setting questions and designing pre-learning activities

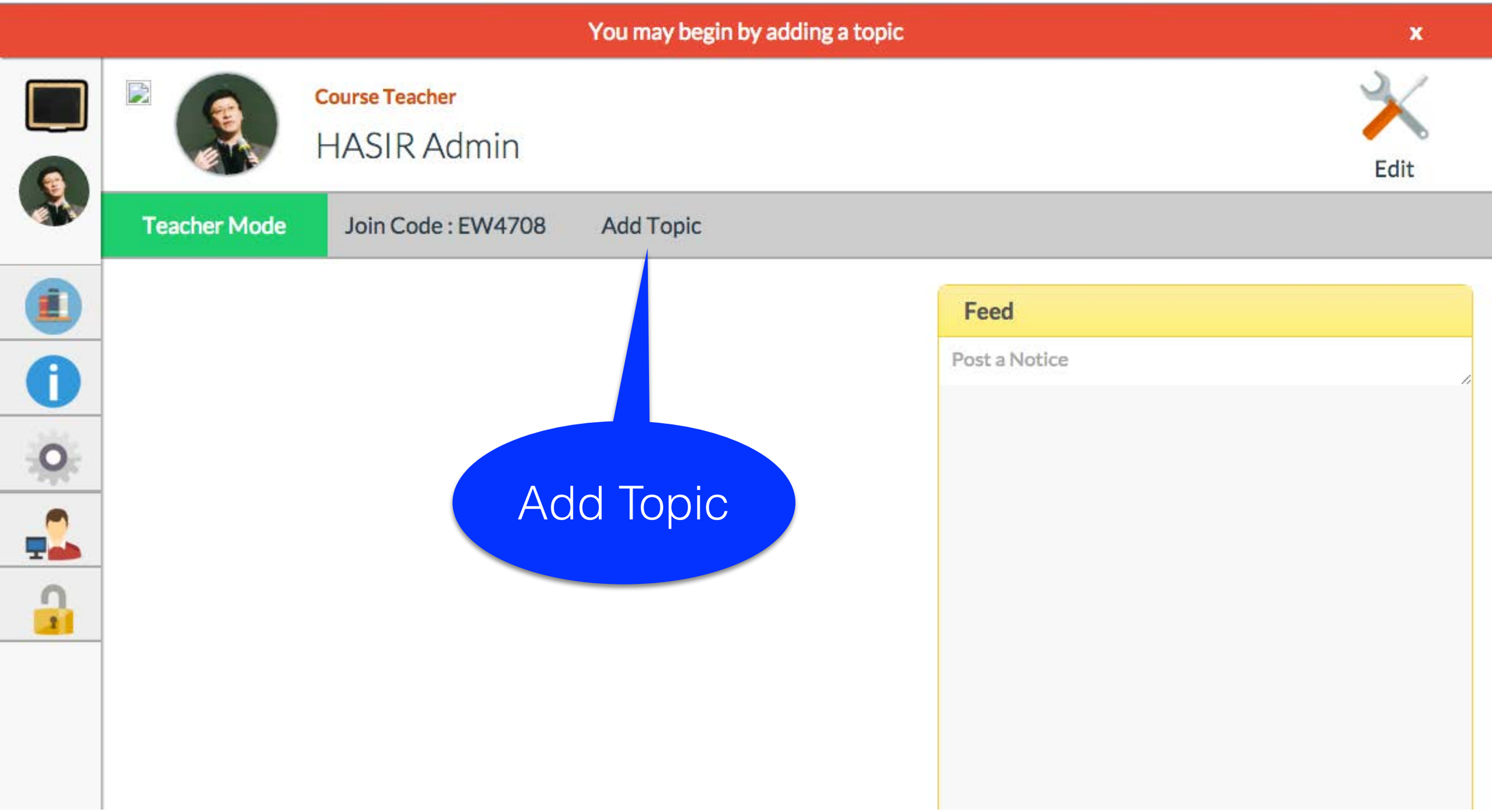
Structure

Add Course

Add Topic

Add Activity

Add Topic


You may begin by adding a topic
x
Course Teacher
HASIR Admin
Edit
Teacher Mode
Join Code : EW4708
Add Topic
Add Topic
Feed
Post a Notice

Add Activity

小三數學上學期

Course Teacher

HASIR Admin

Edit

Teacher Mode | Join Code : EW4708 | Add Topic

聰明的加法

Star | Add

Topic Folder

觀看影片 – 聰明的加法

考考你

Add Activity

Feed

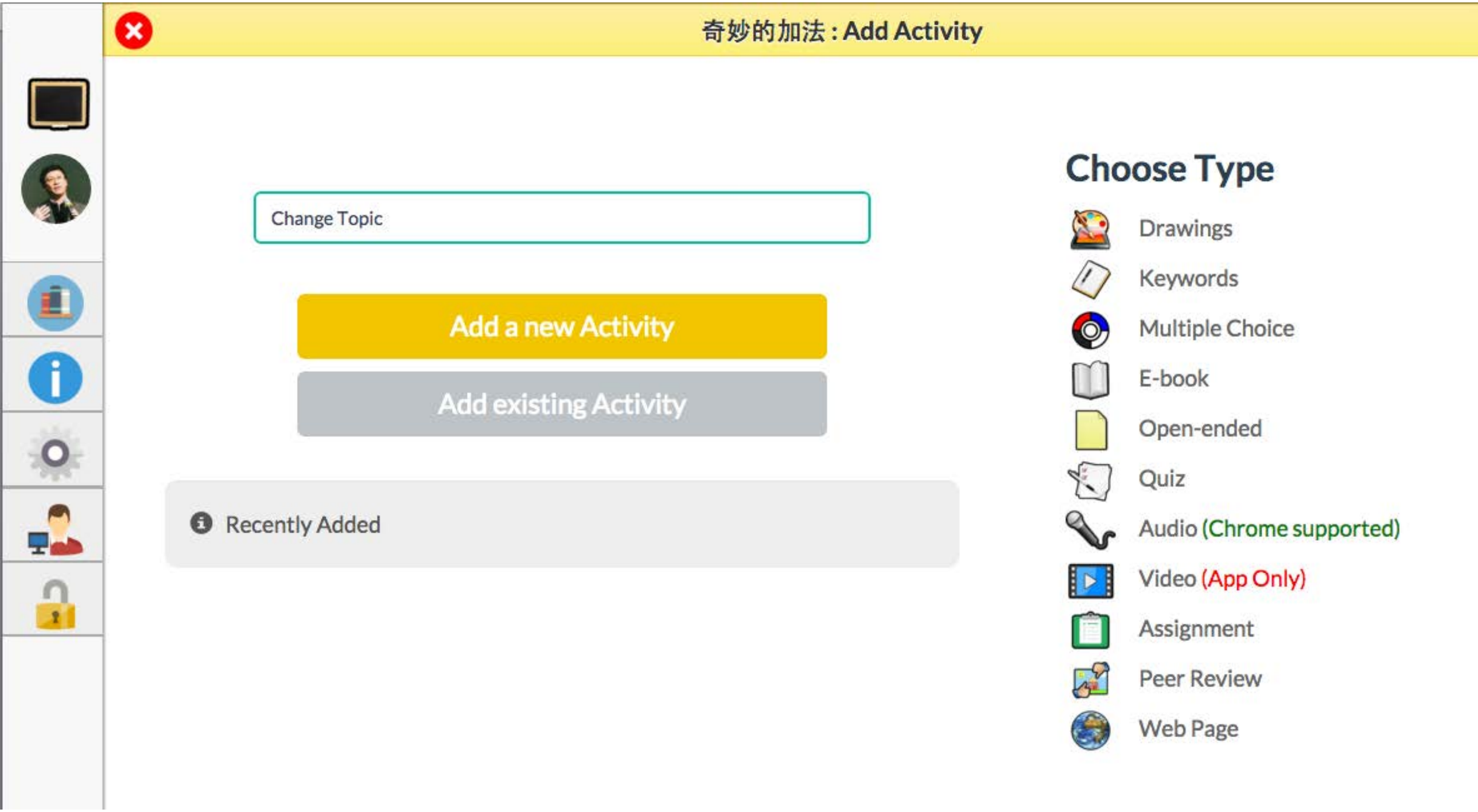
Post a Notice

P3MATH — Go To Activity
An Activity named 考考你 was posted on Topic 奇妙的加法
Sat, 26 Dec 2015, 3:11 PM 0 React Comment (0)

P3MATH — Go To Activity
An Activity named 觀看影片 – 聰明的加法 of Topic 奇妙的加法was edited
Sat, 26 Dec 2015, 2:39 PM 0 React Comment (0)

P3MATH — Go To Activity
An Activity named 觀看影片 – 聰明的加法 of Topic 奇妙的加法was edited
Sat, 26 Dec 2015, 2:38 PM 0 React Comment (0)

Add Activity



Activities Tryout

Drawings

Keywords

Multiple Choice

E-book

Open-ended

Quiz

Audio (Chrome supported)

Video (App Only)

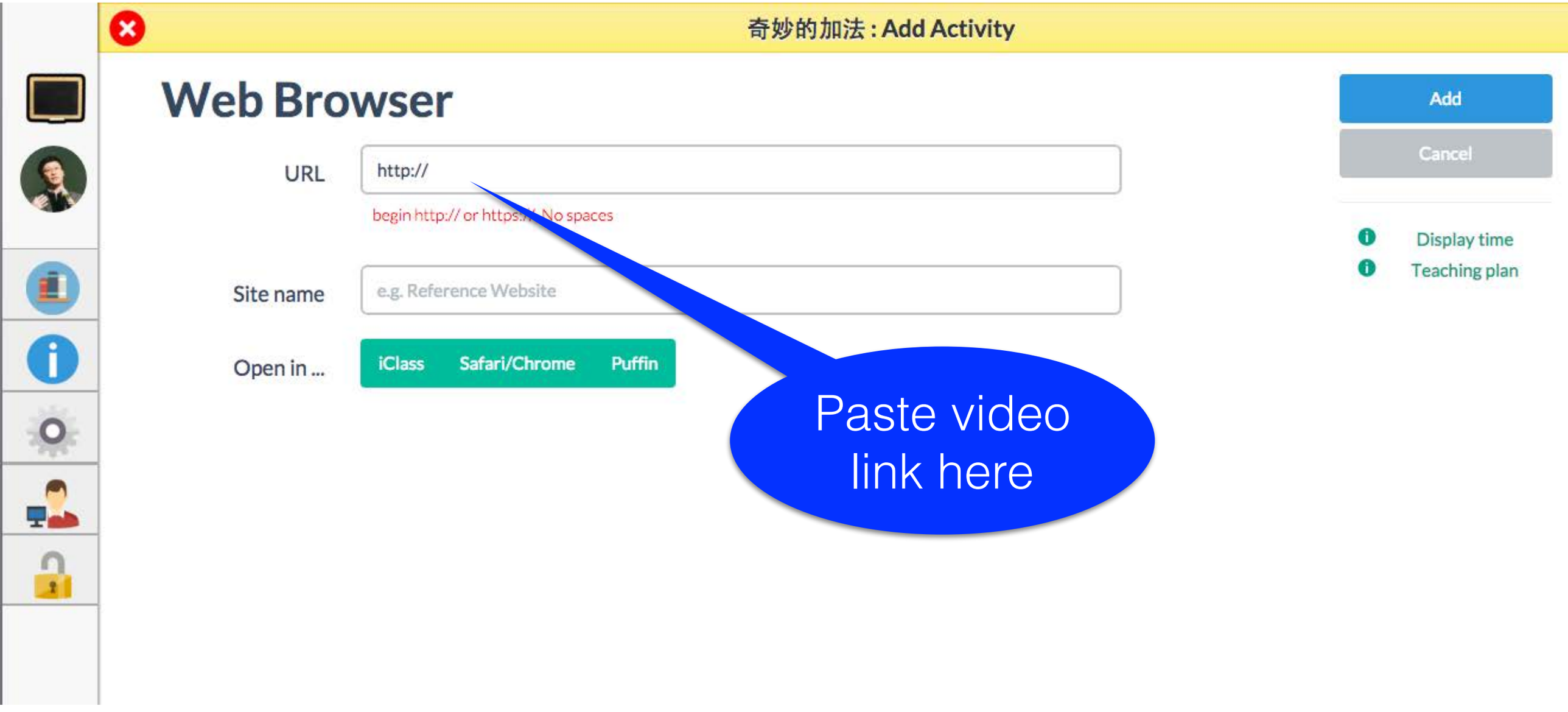
Assignment

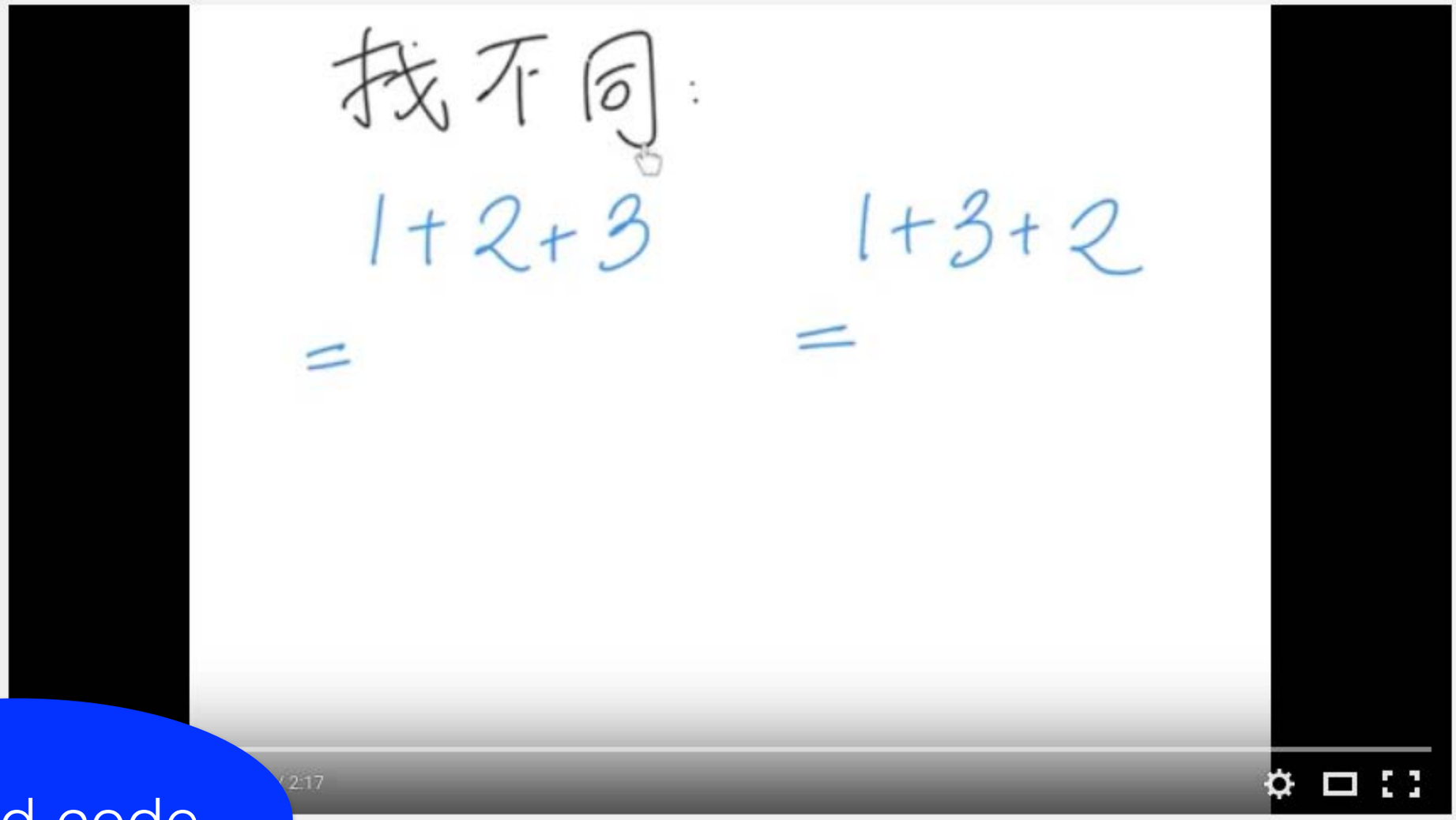
Peer Review

Web Page

Add Web Page

Embedding Video in Activity





Embed code

Show more

聰[illegible]的加法

henry ha

Channel settings

Analytics

Video Manager

No views

Add to

Share

More

0

0

Share

Embed

Email

<iframe width="640" height="480" src="https://www.youtube.com/embed/[illegible]Lh7EH_O6WE?rel=0" frameborder="0" allowfullscreen></iframe>

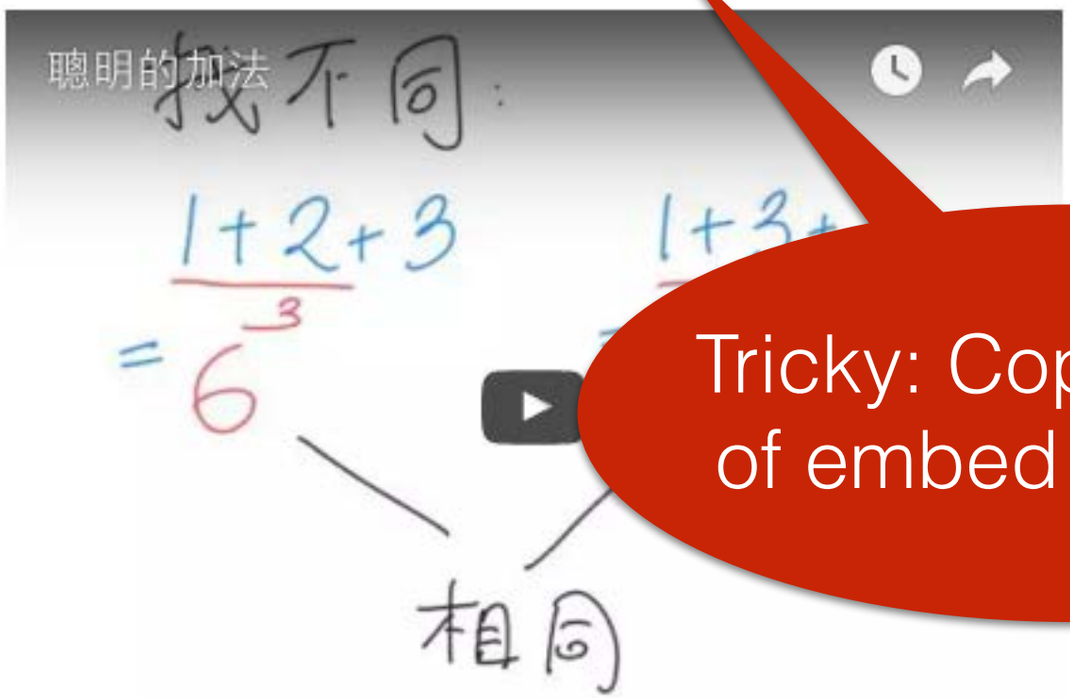
SHOW MORE

https://www.youtube.com/embed/uLh7EH_O6WE?rel=0

Share Embed Email

<iframe width="640" height="480" src="https://www.youtube.com/embed/uLh7EH_O6WE?rel=0" frameborder="0" allowfullscreen></iframe>

Preview:



Tricky: Copy this part of embed code only

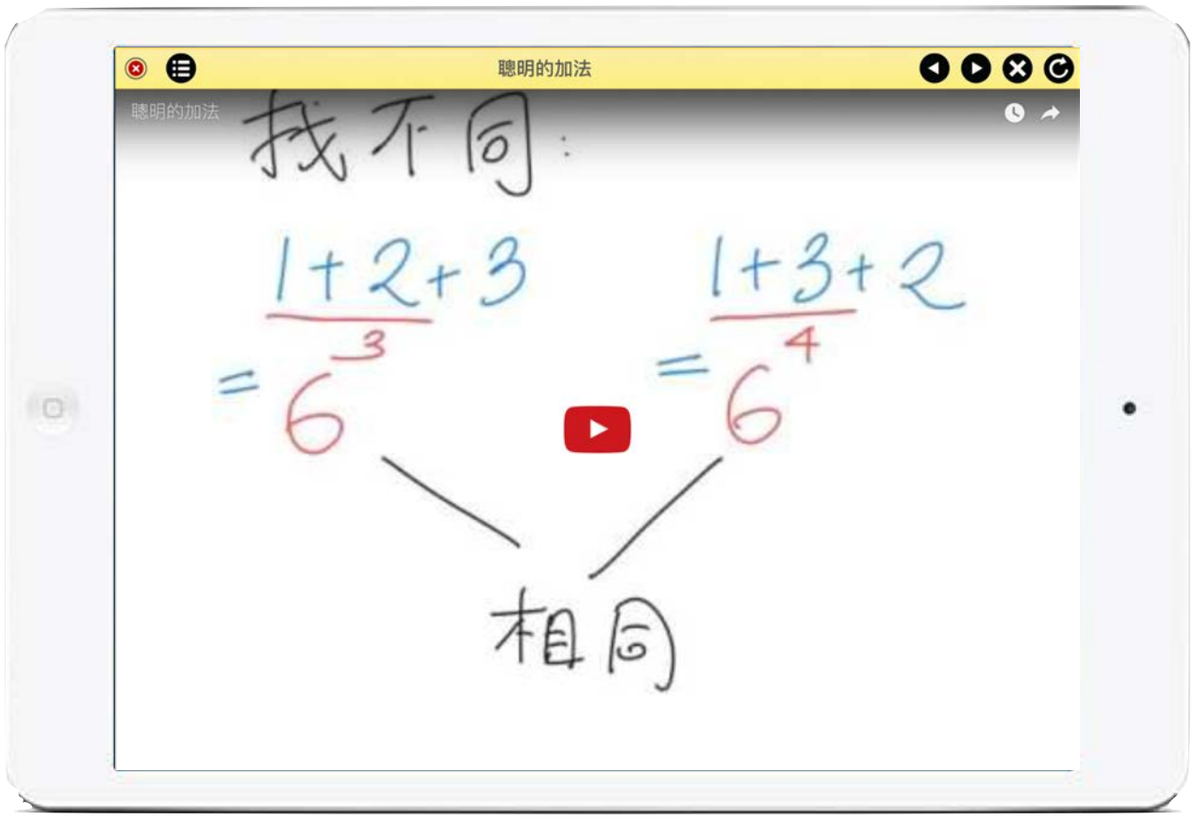
Video size: 640 × 480

- [ ] Show suggested videos when the video finishes
- [x] Show player controls
- [x] Show video title and player actions
- [ ] Enable privacy-enhanced mode [?]

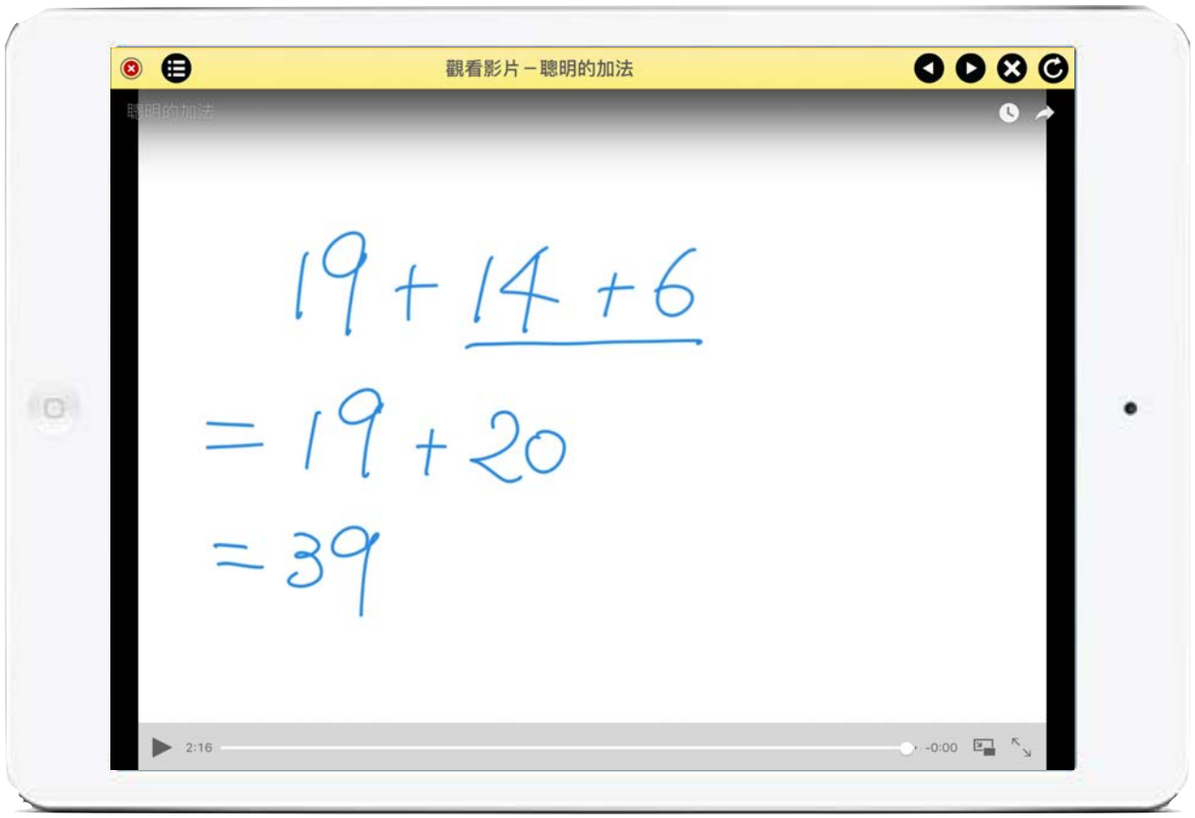
Uncheck to suppress Ad when video ends

By displaying YouTube videos on your site, you are agreeing to the YouTube API ter

SHOW LESS



Test video on iPad



No advertisement
at the end!

Checking Understanding

Multiple Choice

奇妙的加法 : Add Activity

MC Quiz

Add Question

Activity Name 考考你

Add

Cancel

Question 1 MC

Question 2 MC

Question details

Question text

9 + 18 + 1 =

Display time

Teaching plan

Enable LaTeX

LaTeX guide

Attachments

+

Question type

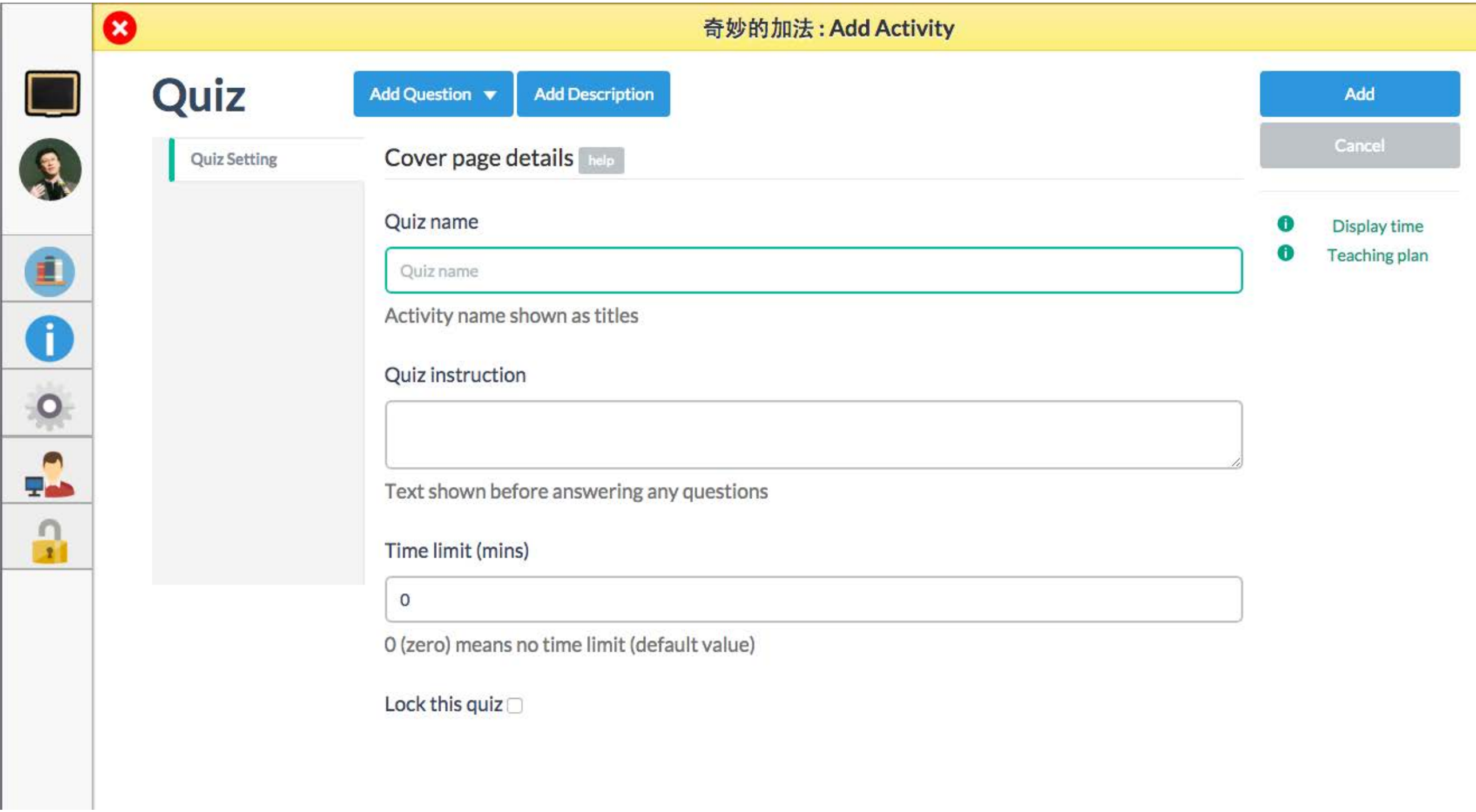
Single answer | Multiple answers

Choices

- 18
- 28
- 29
- No answer (open-ended)

Add Quiz

Add Quiz


奇妙的加法 : Add Activity
Quiz
Add Question
Add Description
Add
Cancel
Quiz Setting
Cover page details
help
Quiz name
Quiz name
Activity name shown as titles
Display time
Teaching plan
Quiz instruction
Text shown before answering any questions
Time limit (mins)
0
0 (zero) means no time limit (default value)
Lock this quiz

Collect handwritten response

Drawings

小三數學上學期 : Edit Course

Drawing

Activity name 考考你加法

Save

Cancel

Display time

Teaching plan

Backdrops for drawing

File size (max. 4MB) Format (.png/.jpg/.gif)

Existing backdrop

27 + 39 + 21

=

Upload a background image for students to work on

Choose another backdrop

Stickers

File size (max. 2MB) Format (.png/.jpg

Select Files

Drag and drop files here or click "Select Files".

$$27 + 39 + 21$$

$$= 27 + 60$$

$$= 87$$

2.5 Strategies of Re-designing Day-time Lesson Pedagogies and Activities (Brainstorming)

If students have pre-learned

What should I do with my students in day-time lesson?

Brainstorming session (10 mins)

In-class Activities

Group work
Collaborative learning
e-Learning
Problem Solving

Follow up and Individual Guidance

Whole class

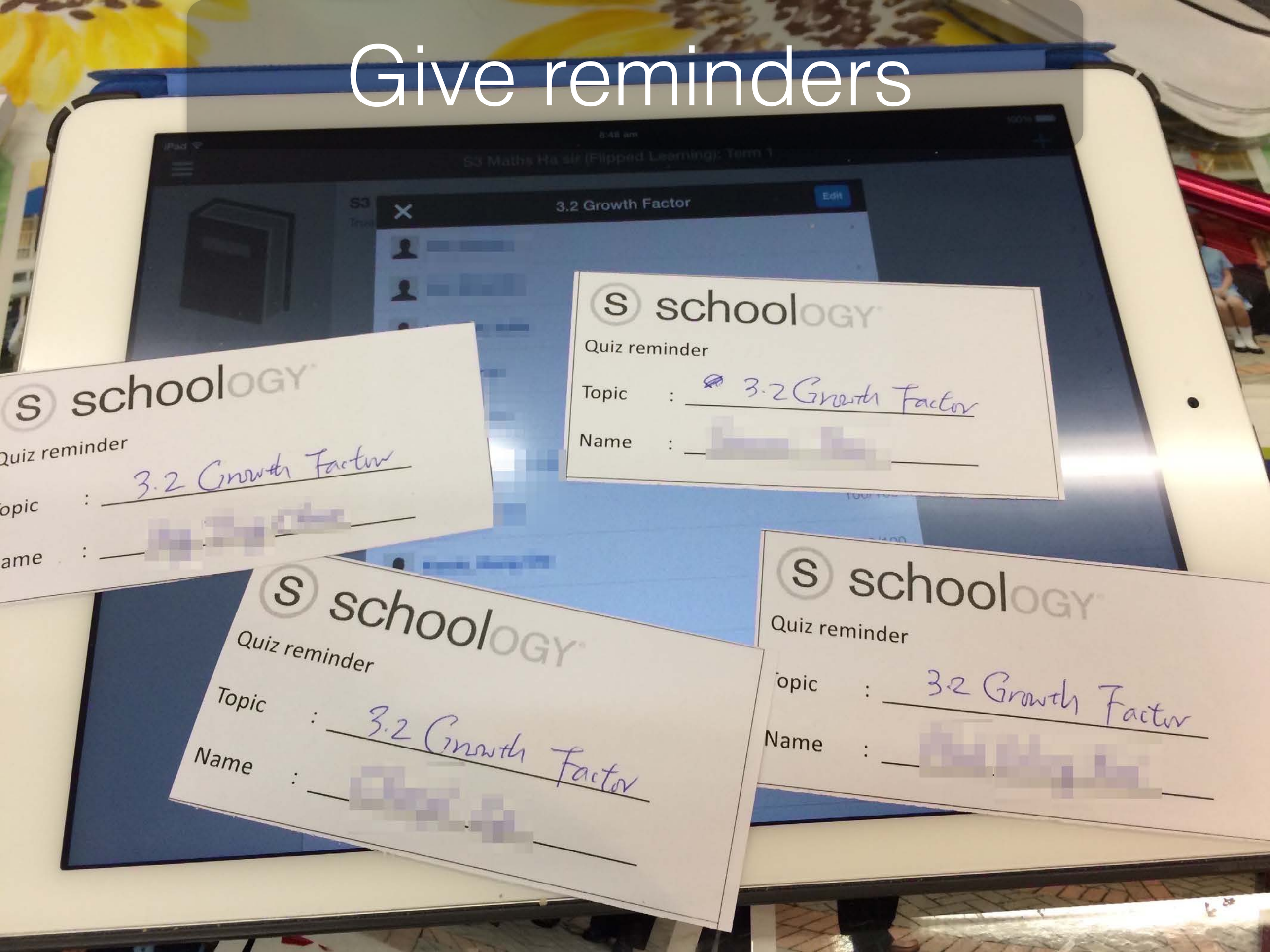
Follow up common misconceptions and corrective feedback

Individual student

Individual guidance keeping off-task students on-task

How to handle pre-learn-less students?

Give reminders



Will engaging the parents be a way out?

Traditional homework

Flipping classroom

2.6 Discussion on Common Pitfalls when ‘Flipping the Classroom’

Flipping classroom is

Interchanging the activities students doing at school and at home

Not adding extra workload (watching videos) to students at home

On-line learning with video

≠

Flipping Classroom

On-line learning
with video

Teacher's corrective
feedback
Re-design daytime
lesson

—

Flipping
Classroom

Students will encounter technical problems in pre-learning

Lost accounts, forget passwords, app crash, system bugs, need to reset quiz

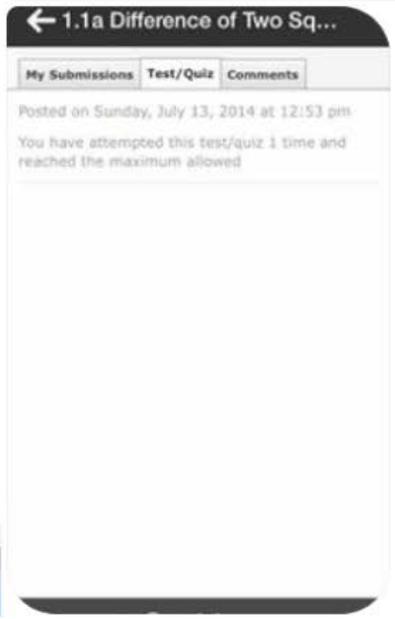
How to handle?

●●●●○ SMC HK LTE 10:16 pm 96%

Back

[redacted]
Active 11m ago

Sorry to bother you, but is it my problem or is it really like this? XD



let me check the total number of trials of each quiz

Thanks! 😊

you are redoing them now?

I'm about to redo them XD

Hehehe

Type a message...

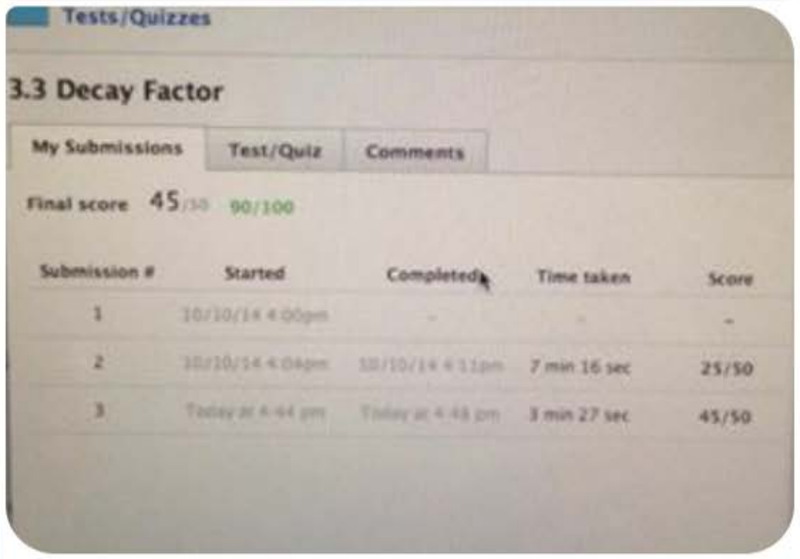
Aa

●●●●○ SMC HK LTE 10:16 pm 96%

Back

[redacted]
Active 11m ago

Mr Ha, sorry to bother you, there's one exercise that I didn't submit but it was counted as "one try" 😭



yes, just delete it for you

Thank you! 🙈

1 JAN 5:16 PM

Oh and also... We don't have to do chapter 7 yet right? Only calculate until 6.5? 🙈

Type a message...

Aa

Future possible technical difficulties

Ask the following:

Google

YouTube

Your school IT panel

Your school TSS

Me

Flipping Teachers WhatsApp Group

(Voluntary, not related to EDB and CUHK)

My WhatsApp: 9171 4947

2.7 Conclusion, Q&A

Student’s Feedback

-我認為不是太習慣，但六星期後感到有所幫助

-因為放寒時，Math老師叫我們去預習書本，但我們卻沒有動力去自動做。一但網上預習令我們發覺自動自覺去做，又花很少的時間。

我起初不相信數學可以用這種方法教學，但現在教學不但比其他班別快，我和同學通過教學影片，更快和容易理解教學內容。在家裏做備課工作紙、觀看影片等都令我對教學內容有更深的認識，不像以往只能以做練習的方法溫習，對學習十分有效。

I think it's okay, but sometimes the worksheets and videos don't clarify enough and ~~the~~ I just ask my classmates. If we get scored in Schoology, I think it's a bit unfair because the teacher may not have talked about it yet and we are already being graded on it, so of course we get a low score.

這是大家習慣了晚上在家中做功課，現在是日間在課堂上做

最好嘅地方係可以喺課室上發現5明白嘅地方立刻處理

5會番屋企5識做拖拖下5記得有咩5明

你講中了 👍👍👍

😊

而你也真的由B變A！

:)仲冇上年對數學咁反感

何解?

經常未明晒?

係

5明就5鐘意

Type a message...

Aa

5會番屋企5識做拖拖下5記得有咩5明

It has definitely left me with more time to study, as the exercises aren't exactly "homework" because they're pre-learning exercises.

So I've had more time to work on things that I'm not as good at, whether it is a harder topic or a different subject.

在 Schoology 的預習短片中可以在不明白的地方多看幾次直至明白為止，

但在課堂上如果老師要重覆解答每個學生不明白的問題是不可行的，但 Schoology 就能做到。

因此課堂的學習進度會比其他班快。

問多一個問題，就是今年數學你覺得學成點?

5:10 PM

我覺得今年嘅數學更加令我更加清楚明白，比起上年的課堂更加有趣

7:20 PM

呢個方法唔會令我想上堂瞓覺

7:23 PM

You have really shown great improvement over last year in maths, can I know why?

12:51 PM

Because I did a lot of exercises

2:27 PM

Why it does not work last year?

2:32 PM

Because I was lazy last year and I did nothing for mathes but after I got the super low marks last year I realized that I need to put effort in matches in order to go back to the upper, also your videosssss reli worksss I keep looping your videos when I font understand the mathes😁

2:34 PM

From traditional to flipped

Think Big Act Small

Prepare pre-learning quiz during vacations

Start with the most difficult chapter?

Persistence