



Technology-Enriched Student-Centered Learning

Ricky Kwok

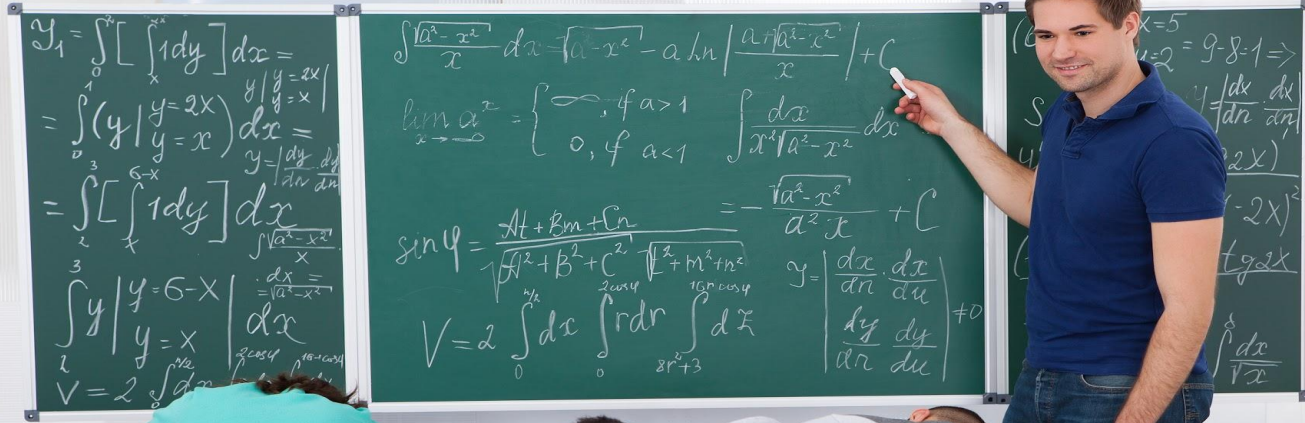
Hong Kong Metropolitan University

“... ridiculously slow download speed” - Elon Musk



- Students don't want to invest their time/attention?
- Wrong value proposition? Lose-lose situation?

Quality of Interaction?

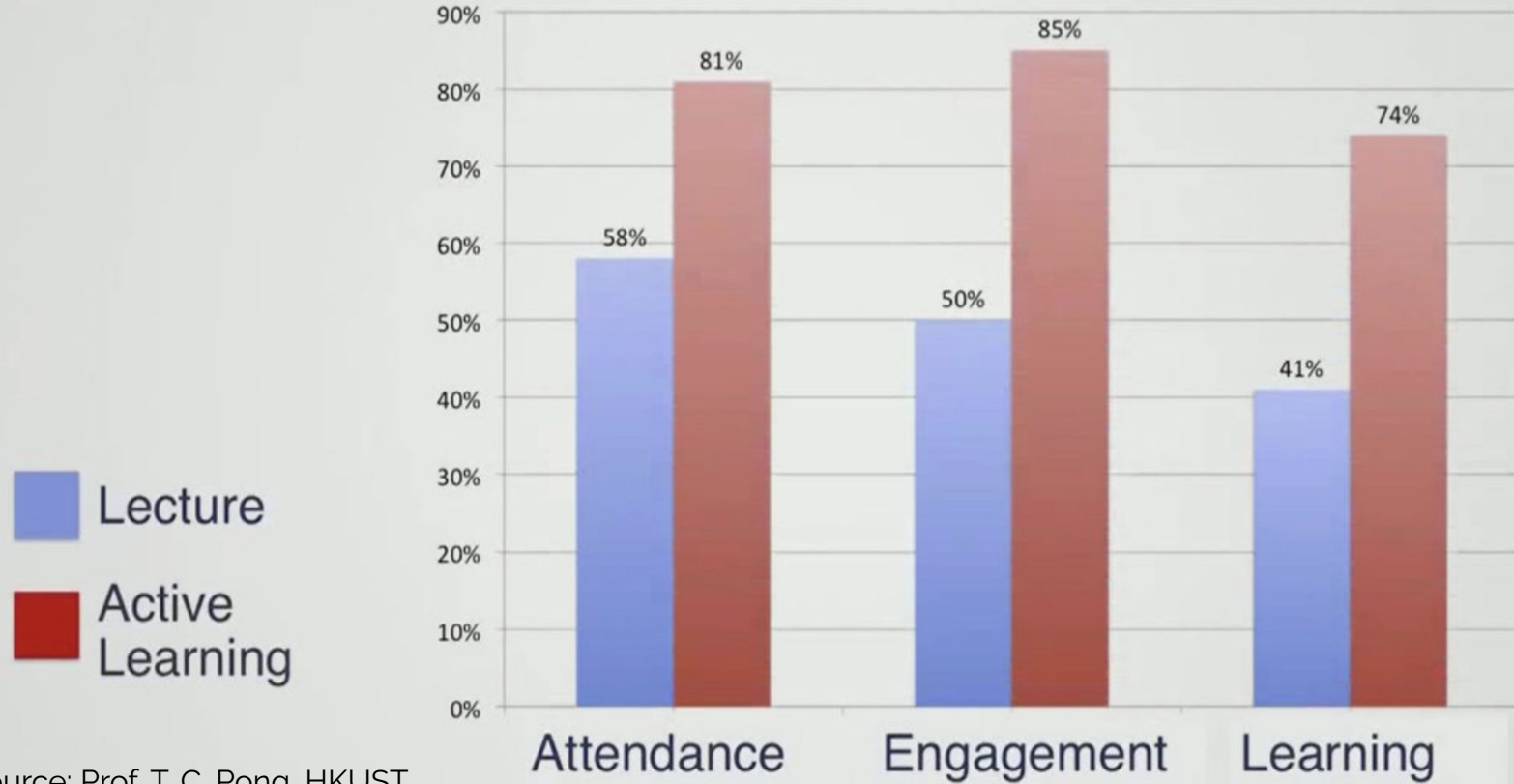


- Energy level?
- Cognitive stimulus?
- Active learning?

A large lecture hall with rows of colorful chairs (red, yellow, blue, green) and a projector screen at the front. The text "Quality Learning Time?" is overlaid in large white font. The room is mostly empty, with a few people visible in the background near the front. The projector screen shows a grid pattern. The text "LC504" is visible on the back of a chair in the foreground.

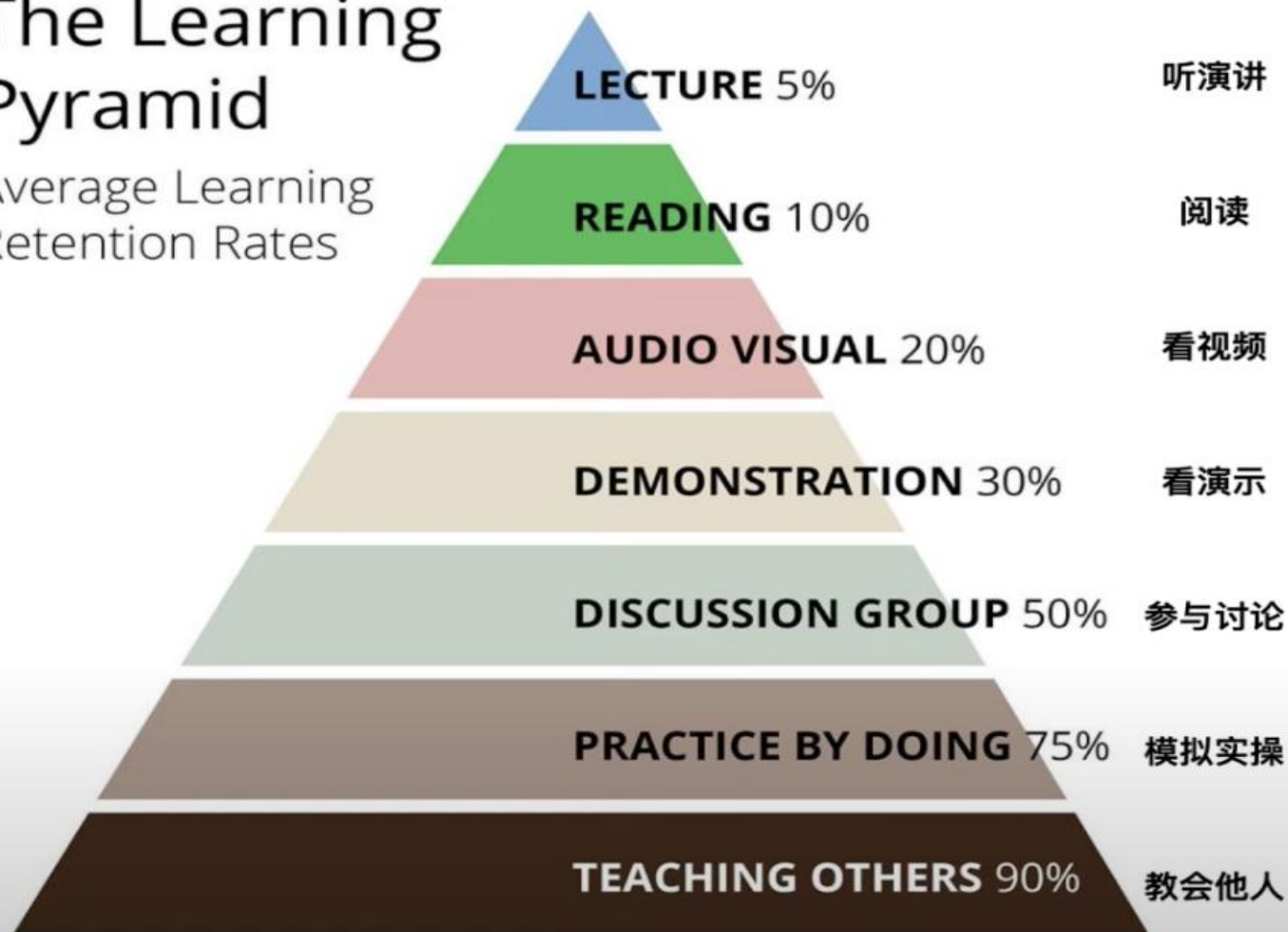
Quality Learning Time?

“Improved Learning in a Large-Enrollment Physics Class,”
Louis Deslauriers, Ellen Schelew and Carl Wieman, Science (2011).



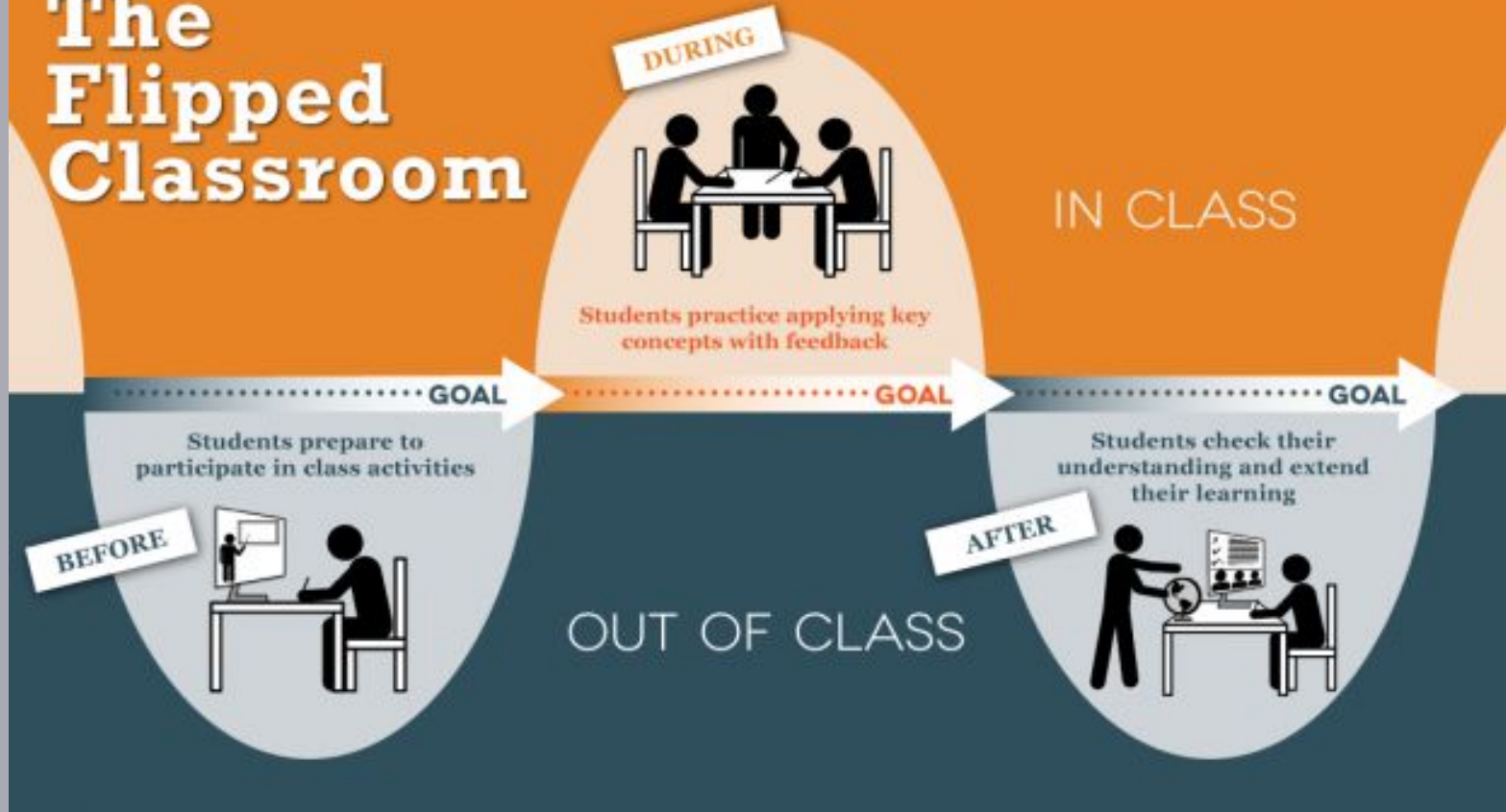
The Learning Pyramid

Average Learning Retention Rates



Adapted from NTL Institute for Applied Behavioral Science

The Flipped Classroom



Source: <https://facultyinnovate.utexas.edu/teaching/strategies/flipping/different>



CCST9003 Scientific and Technological Literacy Everyday Computing and the Internet



Walk The Talk



Course Description
Course Learning Outcomes
Offer Semester and Day of Teaching
Study Load
Assessment
Required Reading
Recommended Reading
Course Co-ordinator and Teacher(s)

Timetable for Lectures

Non-Permissible Combination:
CCST9004 Appropriate Technology for the Developing World /
CCST9015 Electronic Technologies in Everyday Life



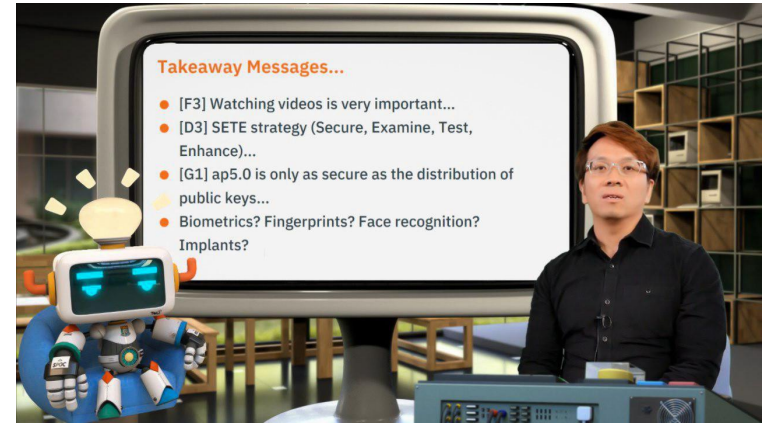
Sustainable Development Goals



Lectures and basic assessments on **LMS**

Making online lectures

- DIY stations readily available



Takeaway Messages...

- [F3] Watching videos is very important...
- [D3] SETE strategy (Secure, Examine, Test, Enhance)...
- [G1] ap5.0 is only as secure as the distribution of public keys...
- Biometrics? Fingerprints? Face recognition? Implants?

In our classroom, technology
(e.g., MOOC lectures) creates:

Quality (Face-)Time!

"What can I do for you?"

No lecturing is needed, professor
becomes much more accessible!

HKU

PKU

CCSTg003: Computing Board Game



CCST9003: Classroom



Board Game #2

- When your game is finished ask a TA to check-in your scores
- Place dice on the table or take it back to the table
- Group members will be identified



“

Low tech but high energy
classroom...



“

Use the classroom as
makerspace...



USB Speakers



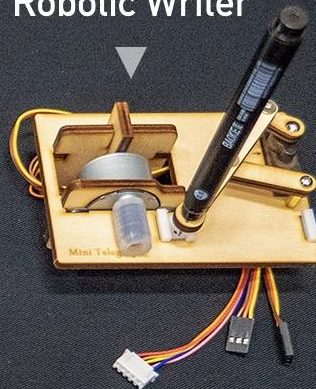
Camera Module



Raspberry Pi 3 Model B+



Robotic Writer



USB Microphone



microSD Memory Card



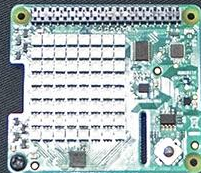
Sense HAT Extension Cable



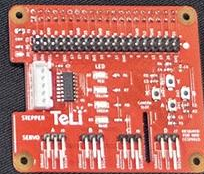
Micro USB Power Adapter



Sense HAT



CCST9015 Expansion Board



CELTICS

Co-curricular **E**xtracurricular
Learning **T**oward **I**nnovative
Comprehensive **S**oft-skills

A HKMU Initiative

Led by Ricky Kwok

Electronic Portfolio



- Documentation of learning journey
 - Photos, videos
 - Reflections of experiences

- Feedback & assessment
 - Peer
 - Advisor, mentor

- Generate evidence-based CV
 - LinkedIn

Using English OER Textbooks

Open Textbook Project Website



香港開放教科書
Open Textbooks
for Hong Kong

Free to use.
自由編輯運用
Free to change.
共享優質課本
Free to share.

Member

Login

Sign up

Input keywords...



<http://www.opentextbooks.org.hk>

What are
Open
Textbooks?



Learning and Teaching Expo 2015

16 November, 2015 - 09:59

The "Open Textbooks for Hong Kong" Project will showcase *Open English* at booth K05 and conduct a seminar for teachers (Seminar Theatre II) at the Learning and Teaching Expo 2015 between 10 and 12 December. (Read more)

Visitor registration (FREE)

About our booth K05

About our seminar

About *Open English*

Blog



About Open Textbooks

News and Events

Discussion Forum

Resources

Primary
Textbooks



Photo: courtesy of
HKSAR Government

Secondary
Textbooks



Photo: courtesy of
HKSAR Government

Textbooks
for
Certificates
and Diplomas



Tertiary
and
University
Textbooks



154170 reads

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Project developed by



Project supported by



香港賽馬會慈善信託基金
The Hong Kong Jockey Club Charities Trust



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Using English OER Textbooks

Multiple Formats of Open English

PPT slides

Print

PDF

Mobile app

Audio

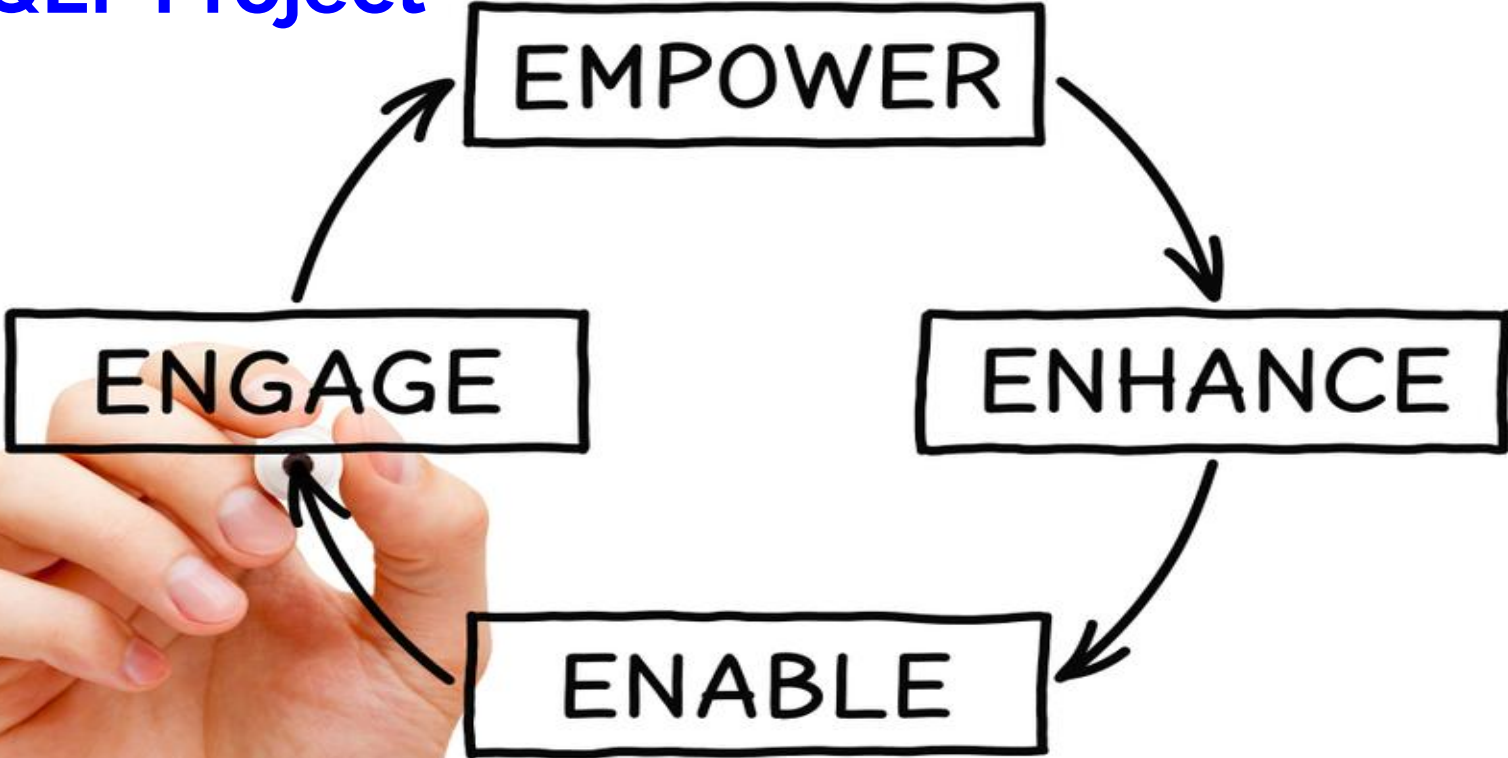


EdBookshelf

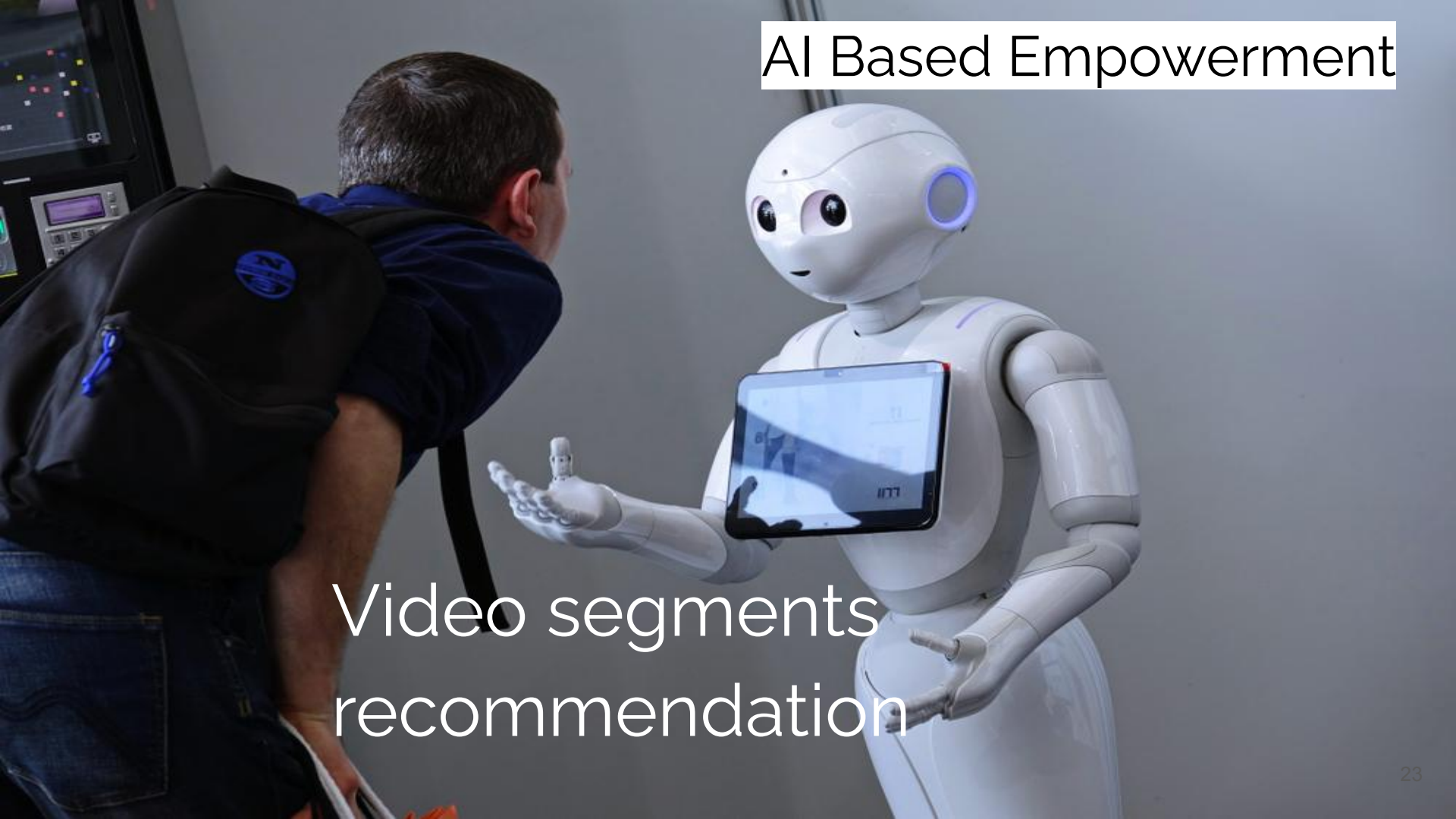
ePub

HTML

New QEF Project



AI Based Empowerment



Video segments
recommendation



THANKS!

Happy to further discuss

Email me at kwok@ouhk.edu.hk

Slide URL: bit.ly/EC-220126