

# Open Textbooks A strategy for effective e-learning

**Open Textbooks Project Team Open University of Hong Kong** 



# **Textbooks in Hong Kong**

### Role in teaching and learning

- Important role in the teaching and learning process
- Compiled according to syllabuses and curriculum guides of EDB





## **Problems with textbooks**

### **High prices**

• Prices are deemed to be too high. Why?





# High textbook prices

### Why?

- Hong Kong's textbooks market is confined to Hong Kong (hence small);
- Schools exercise the choice of the books from a Government recommended list, and the end user, i.e. the students, purchase that particular textbook.

Consumer Council (2001)





# High textbook prices

### Why?

Textbooks are associated with supplementary teaching and materials such as worksheets, quizzes, and multimedia classroom aids, etc., and the production of these items add to the cost of the textbooks.

Consumer Council (2001)





# High textbook prices

### **Solutions**

- The EDB demanded that publishers de-bundle the non-textbook items from the book in 2012.
- As well, EDB in 2012 tightened the rule to forbid publishers to adopt a new edition within 5 years without good reasons.





# Ways to curb high textbook prices

### **Dubious effect, and new problems**

- The effect of publishers de-bundling non-textbook items from the book on textbooks prices has not be apparent.
- The 5-year rule for revision of textbooks without good reasons requires all students using old version textbooks.





# The major problems we found:

### **Deterring e-learning**

- Students are **not** provided with **e-version** of textbooks, and hence cannot make use of the useful functions available.
- Printed books not flexible enough for updating, or school/class based tailoring.





# The major problems we found:

### Teachers difficult to contribute efforts

• Many teachers are helpless even if they want to develop their own teaching and learning materials or even textbooks, on a non-profit making basis, for fulfilling a school based curriculum, or for the special needs of their students. Teachers' works are not shared among colleagues.





### Government's work

### Textbooks, e-textbooks and e-learning

- Cognizant of the role of learning resources in education: HKEdCity's work; but does not provide or assists the production of textbooks.
- Position until 2009: 'e-Learning resources will not completely replace printed textbooks'.
- In May 2012, EDB launched the E-textbooks
   Market Development Scheme (EMADS), which
   provided subsidy to non-profit-making
   organizations to develop e-textbooks.



A good way to cut textbook prices

And an effective strategy for e-learning!



### What are they?

- They are a kind of Open Educational Resources (OER).
- They are usually digitized textbooks accessible online at no cost, and also available in affordableto-purchase printed copies.
- The open content can be revised, reused, often remixed and customized under a Creative Commons license.



### What are they?

In short, open textbooks:

- consist of digital materials (in many file formats, including web, audio, pdf, ePub, and Word versions);
- are freely available for use and adaptation by anyone;
- are coherent in content and are aligned with particular curricular guidelines and standards, and can be customized to meet individual needs.



### A way to produce and distribute books

- Open Textbooks provides a more flexible and less expensive model for producing and distributing books.
- Open textbooks seem to be a good solution to address a combination of issues involving costs, intellectual property rights, access and utilization (Kamenetz, 2010).



### You are permitted to do the following without asking

Generally, open textbooks allow users to:

- Use the textbook without compensating the author;
- Copy the textbook, with appropriate credit to the author;
- Distribute the textbook, usually non-commercially;
   and
- Shift the textbook into another format (such as digital or print).



### Now a world trend

#### General

- Multimedia Educational Resources for Learning and Online Teaching
- The Collaborative Books
- Connexions (1)
- Wikibooks (e.g. math)

#### **Schools**

- California Learning Resource Network
- Global Text
- Free Textbooks Poland
- CK-12 Foundation -FlexBooks
- Free High School Science Texts (South Africa)



#### **Higher Education**

- Make Textbooks Affordable project
- Open Textbook Catalog
- The Community College Consortium for Open Educational Resources
- Flat World Knowledge
- Community College Open Textbook Collaborative
- Einstein University



#### Benefits to teachers and students

Much less expensive, because users only pay for printing.



#### Benefits to teachers and students

Open textbooks are a good strategy for effective elearning!



#### Benefits to teachers and students

Especially when the printed version is used with the e-version!



#### Benefits to teachers and students

E-versions are given away free.

 Teachers and students are free to use, reuse, remix and distribute the e-textbooks and associated open materials.



#### Benefits to teachers and students

• The contents can be modified to meet individual school needs.

Teachers are free to experiment with the contents and the educational technologies, and invent their own pedagogies in an e-learning environment!



### Why do we take up this project?

- OUHK's mission is to promote 'Education for All'
- Rich experiences of employing emerging technologies and innovations to improve access, lower costs and raise quality and standards
- Expertise and personnel in developing multi-media and flexibly structured course materials
- OUHK benefits from some of the components
- However, we are not a textbook publisher!



### Four components – a brief description only

- An online open textbook platform
- Online textbooks and teaching materials
- Quality assurance
- Community and capacity building





### Four components

- An online open textbook platform
- Online textbooks and teaching materials
- Quality assurance
- Community and capacity building





# **An Online Open Textbook Platform**

### A repository and a collaborative environment

- An online collaborative environment which allows file (of various file formats) download, and upload of modified files
- Allows sharing of teaching experience and development of skills in teaching and learning.





### Four components

- An online open textbook platform
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- Community and capacity building





## **Open Textbooks and teaching materials**

### From universities to primary schools

- 12 open textbooks for P1 to S6 on English language in accordance to EDB syllabuses
- Hundreds of universitylevel open textbooks and courseware units
- Course materials for diploma and certificate programmes
- OUHK course units





### Four components

- An online open textbook platform
- Online textbooks and teaching materials
- Quality assurance
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# **Quality assurance**

### **Experts and peer review system**



- A team of experts to develop and to monitor the development process, and assess the quality of items in the system
- External and peer reviews
- Vetting by EDB for placement on Recommended Books List.



### Four components

- An online open textbook platform
- Online textbooks and teaching materials
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- Community and capacity building





# Community and capacity building

#### A consortium of contributors and users

A consortium made up of potential contributors and beneficiary institutions to share expert, input manpower, coordinate efforts and spread knowledge.





# Community and capacity building

### A consortium of contributors and users

- Training on the development and use of Open Textbooks.
- A public forum for teachers, students and other users.





# **Open Textbooks for Hong Kong**

# An OUHK project





### **Present status**

### Work progress so far

- Funding of \$17.5M for the project has been obtained from HKJCCT with support from EDB.
- Project officially started on 1 January 2013.
- For primary and secondary schools, only textbooks on English language have been planned in this project.
- Writers and instructional designers are now busy writing the textbooks.



### **Present status**

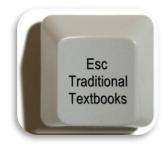
### Plan for vetting by EDB

- We plan to submit the first batch of the textbooks (KS1 and KS3) to EDB in January 2015 for vetting.
   The second batch (KS2 and KS4) is planned for April 2015.
- We have started trying out the textbooks in September 2014. You are welcome to join the second round of pilot use in January 2015.
- The set of 12 textbooks (fully vetted by EDB) are expected to be ready for use by schools in the September 2015 school year.



### How do you use them?

- Four versions are usually made available beside print: PDF, EdBookshelf, ePub and web versions.
- The printed book can be in one single volume, or separate booklets.
- Note the special functions/features offered in PDF,
   EdBookshelf, ePub and web formats.





## **Open Textbooks**

### **Electronic versions**

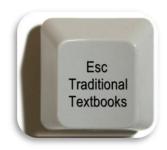
- For language learning: dictionary and pronunciation; text-to-speech function;
- Concept organization: hyperlinks provide immediate access to related topics, cases, simulation and videos;
- Different levels of interaction: with multimedia feedback and choice of learning paths;
- Others: Search; What-ifs (interactive tables and graphics); highlighting; bookmarks; notes-making; text enlargement; ...
- Communication tools: discussion boards, ...



## **Open Textbooks**

### Freedom for teachers to:

- Use the textbook as-is;
- Produce or reproduce some parts of the textbook only;
- Modify the book and use the new version to suit their students' needs (mix and match);
- Share your work among teachers;
- Even students can take part in the revision.





### **Using various file formats**

Interactions	Format	Main Features
Level 1	Print	Space to jot notes, underlining, highlighting
Level 2	PDF (access through iBook, iOS)	Looking up vocabulary using built- in (iBook) dictionary; search; hyperlinks
Level 3	eBook (access through HKEdCity EdBookshelf)	Note-taking; highlighting; looking up vocabulary; search; hyperlinks; text-to-speech; playing pre-recorded audio clips



### **Using various file formats**

Interactions	Format	Main Features
Level 4	ePub (access through iBook, iOS)	Note-taking; highlighting; looking up vocabulary; search; hyperlinks; playing pre-recorded audio clips; interactive activities (off line)
Level 5	Web version (access through a browser)	Note-taking; highlighting; Looking up vocabulary; search; hyperlinks; playing pre-recorded audio clips; interactive activities (online); activity records, sharing and collaboration; erasing text.







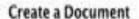












Create or make edits to a document.

#### iCloud stores it

Your apps can store documents in iCloud.



#### And pushes it to your devices

Your documents automatically appear on all your devices.



Web version: sending activity records to server

TOTAL MAN STREET

### **Using various file formats**

### **Teaching Strategies:**

- Project the eBook or Web file on the screen, to show pre-reading activities etc
- Play audio sound tracks with PDF, eBook and ePub files
- Highlight new words
- Examine pictures/graphs/tables/figures
- Practise listening and pronunciation with appropriate versions
- Conduct class activities with ePub/Web version
- Complete exercises and check answers



## **Using various file formats**

- Print copy
- eBook (HKEdCity eBookshelf)
- ePub (iOS)

Before -class

### In-class

- Print copy
- Web version

- Print copy
- Web version
- eBook (HKEdCity eBookshelf)
- ePub (iOS)

After-class



### **Conclusion**

### What do you think?

Are open textbooks a good strategy to implement effective e-learning?

Now you can draw your own conclusion!

