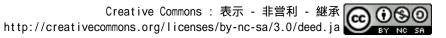# How do Hong Kong teachers like to use open textbook?

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How Do Hong Kong Teachers Like to Use Open Textbook?

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Abstract

This paper traces the initial phase of development of the Open Textbooks for Hong Kong project from its inception in 2013. The project was triggered by the high textbook price which Hong Kong has faced for decades, but its development was also found to provide many otherbenefits to Hong Kong particularly in the enhancement of teaching and learning in the digital era.Against this background, this paperreports on theinitial feedback collected from the potential users and contributors of the project.

Formal and informal feedbackfrom educational planners, government officers, and administrators were gathered through observations and personal contacts of the project team with such people. Feedback was also collected from teachers who attendedto the briefing sessions on the open textbooks project which also invited them to take part in a tryout of the prototype textbooks.An analysis has been made of the responses. A list of suggestions on how to makethe best use of such responsesto assist with the development of the project isprovided in the paper.

Keywords: Open educational resources; open textbooks, learning effective; material development.

Introduction

A group of senior staff at the Open University of Hong Kong strongly believe that universities and schools in Hong Kong can benefit tremendously from the development and use of open textbooks. A proposal was formally drafted and funding was granted in August 2012 for an Open Textbooks for Hong Kong project.

The initial aim of the project was to tacklethe problem of high prices of school textbooks in Hong Kong, but the project team soon finds that open textbooks can be solutionsfor a combination of problematic issues involving costs, intellectual property rights, access and utilization (Kamenetz, 2010). Open textbooks can provide the flexibility for teachers to cater for the specific needs of students of individual schools or classes.With an electronic version of the open textbook on hand, many simple but effective learning functions (e.g. dictionary, text-to-speech, hyperlinks, interactive texts and graphics, audio, search, highlighting, bookmarks, notes making, enlargement of text,

communication tools etc.) can be accessed by students free of charge. This provision is usually not provided by commercial publishers who are wary of piracy and uncomfortable of sufficient copyright protection on their digital product.

The project and its development to date

The objective of the Open Textbooks for Hong Kong project(https://www.opentextbooks.org.hk) is to develop an online collaborative environment to produce open source textbooks which are free, flexible, current and directly available for use and adaptation by universities and schools.

The project was planned to start in January 2013 and to complete by August 2015. Development of the project is in accordance to schedule:

The Open Textbook Platformisbeing developed: Drupal is identified as the Content Management System (CMS); DITA is adopted as the XML structured content format for the open textbooks; and the textbooks will be presented in various formats (e.g. PDF, HTML, ePub and SCORM).

Regarding the contents,for the 12 primary and secondary textbooks, development is in satisfactory progress according to schedule. For textbooks at the tertiary level, over 700 items of open textbooks deemed to be relevant for use in Hong Kong were identified and initially reviewed, and a long list of 336 textbooks were selected for a second assessment by experts. Textbooks at the post-secondary level were also being identified for inclusion.

Feedback from education planners, administrators and other interested people

The idea of open educational resources and open textbooks is quite new to Hong Kong. It will be important for us to know if the concept itself is welcomed by all those who will be involved in the project. The success of the open textbooks project relies on the support of the community for funding, and for continuous contribution and use of the content by teachers and students. Knowing the responses from these stakeholders will help the project team members adjust the deliverables, and improve on the work done so far. It can also help us clarify misunderstanding that the public may have towards the project. The following is a description of the feedback we have gathered from people related to the project.

Government officials

The Education Bureau annually funds successful applicants to the'Chief Executive's Community Projects List'. After many discussions and meetings between the project team members and the Under Secretary and Secretary for Education in 2011 and 2012, the Education Bureau (EDB) was convinced that the concept and practice of open textbooks was worthy of support. During 2012, the Bureau was under pressure to provide a solution to the problem of high textbook prices, and came up with an EMADS scheme (EDB, 2012) to address the issue. When the draft proposal to establish an Open Textbooks platform for Hong Kong was finalized, the EDB deemed that the project could

go along with its e-textbook market development scheme, and offered much effort to get the open textbooks project approved by the funding body, Hong Kong Jockey Club Charities Trust.

The Hong Kong Education City (HKEdCity) is a quasi-government body set up by the government to provide to school teachers and students all kinds of supportive online learning resources, with the exception of textbooks. Its Executive Director has been very supportive of the Open Textbooks project, and the project teamhas worked in collaboration with HKEdCitysince the start of the project. The Open Textbooks project wishes to transform some of the HKEdCity materials and use them in the textbooks. HKEdCityhas assisted in promoting the activities of the Open Textbooks project, such as advertising for the briefing sessions of the project. It is also agreed that the open textbooks will be delivered to Hong Kong schools via HKEdCity'seBookshelf in future.

Legislators and heads of professional bodies

Members of the project team have approachedwith legislators about the concept and implementation of open textbooks in Hong Kong with a view to solicit their support. They were supportive of the ideas but we did not have concrete tasks on hand to cooperate with. Likewise, members of the project team havecontacted the heads of two professional teachers' unions, and chairpersons of the associations of the primary and secondary school principals. These heads of organizations have acknowledged the usefulness of the project, and have offered assistance in publicizing the project to schools.

University administrators and academic staff

Feedback from administrators and academic staff of tertiary institutions in Hong Kong was revealed in a country reporton use of OER in the tertiary (Yuen and Wong, 2013). The participants of the studyappreciated the potential benefits of OER regarding institutional and personal reputation,enhancing users' knowledge, sharing best practices and improving students'access to learning resources. However, only a few (three) out of the 57 participants in the study had submitted and publishedmaterials as OER.Among those who had produced OER, the majority waswilling to share them only within their own institution, whilst only one third wished to share the materials globally. Theyrecognised that OER could help them know about the most up-to-datedevelopments and create a sense of community in the course. They agreed thatOER save time for teachers, allow them to do things they could not do otherwise,provide convenient access and let them stay up to date with colleagues.

In a broader context, respondents believed that OER could help build fruitfulpartnerships with colleagues and institutions worldwide, and benefit students byproviding a range of approaches to the subject available. In addition, respondentsbelieved that OER would enhance the reputation of the university, and attractbetter students and better staff. As well, OER are a useful way of developing new courses.Exploring the available OER worldwide could enhance the respondents' teachingand raise standards across the university.Nevertheless, the majority of the respondents would only use OER in theirteaching if they were able to edit and personalise the materials for use with theirstudents. Respondents were divided overwhether or not to make their teaching practices and course materials open to anyusers, indicating they would be more willing to share their teaching resourcesopenly if they had good control over the reuse by others.

Respondents used OER in their teaching or course delivery for morepractical reasons, such as gaining access to the best possible resources, promoting scientific research and education as public open activities, reducing costs for students and course development, reaching out to disadvantaged communities,assisting developing countries, creating more flexible materials, conducting research and development and buildingsustainable partnerships.

The respondents considered the lack of awareness, skills, time, hardwareand ability to locate quality OER, and the lack of reward and support frommanagement to be important barriers to the use of OER in teaching by theircolleagues.

One author of this paper had the opportunity recently to hold a workshop on OER and Open Textbooks for teachers of the Hong Kong VTC (Vocational Training Council) institutions, and found that the teachers' responses tallied well with the findings of the case study survey.

Feedback from teachers attending briefing sessions

It was planned that for the Open Textbooks project, the twelve open textbooks on the subject English language developed for primary and secondary schools would be tried out before they were to be used in 2015. In March 2014, the project team organized four briefing sessions on the open textbook tryout scheme for primary and secondary schools. A total of 142participants, included school principals, subject panel heads and teachers from over 93 primary and secondary schools attended the sessions. A questionnaire to investigate the teachers' opinions about open textbooks was administered to the participants, and 95 returned (37 from primary schools and 58 from secondary schools). Nearly half of participants at the sessions were panel teachers of the subject (17 out of 37 in primary schools, and 26 out of 58 in secondary schools).

Current use of textbooks

In primary schools, the majority of the schools use commercial textbooks, while in secondary schools, nearly one half of them use commercial textbooks, and the other half use commercial textbooks plus school-based materials (**Table 1**).

Type of teaching materials	Primary	Secondary
Commercial Textbooks	25	28
School-based materials	6	2
Commercial Textbooks + School-based materials	5	24
Commercial Textbooks + EDB materials	1	2
Commercial Textbooks + School-based materials + EDB materials	0	1
Did not responded to this question	0	1

Table 1 What type of learning resources do you use in the school?

Senior secondary school teachers opined that they use a lot school-based materials to help students to prepare for public examinations, while teachers teaching students with special educational needs (SEN) find mainstream textbooks not suitable for their students and they have to tailor-make texts for their classes all along.

What do teachers think of open textbooks?

Teachers attending the sessions in general have a positive view towards open textbooks (perhaps that explains why they attended the session!). Nearly half of the primary school teachers and nearly 60% of secondary school teachers believe that using OER or open textbooks can reducing their workload (compared to developing all the materials by themselves) (**Table 2**). Although many of them only became aware of the concept and practice of OER at the meeting, more than half of the teachers indicated that they would consider using OER, and many of them (29% primary and 21% secondary schools teachers) wouldeven consider participating in the development of OER in future (**Table 3**).

Answer	Primary	Secondary
Yes	18(48.65%)	34 (58.62%)
Not sure	15(40.54%)	18 (31.03%)
No	4(10.81%)	5 (8.62%)
Have not responded to this question	0(0.00%)	1 (1.72%)

Table 2 Can OER reduce workload on teachers?

Answer	Primary	Secondary
Yes (use/develop)	21 (56.76%)/11 (28.95%)	38 (65.52%)/12(21.19%)
Not yet decided	15 (40.54%)/19 (50.00%)	20 (34.48%)/44 (75.86%)
No (use/develop)	1 (2.70%)/7 (18.42)	0(0.00%) / 0(0.00%)

Table 3 Will you use/develop OER in future?

In discussions with the teachers, and in the comments column of the questionnaires, many teachers indicated that they believed the use of open textbooks would become a trend in future; others hold that open textbooks could help students with learning difficulties (because they are free to adapt the content). As well, some teachers found that open textbooks could help students come from low-income families because they are free of charge. There were also some negative views on open textbooks: some teachers felt uncomfortable if their work would be shared among peers, whileone teacherwas reluctant to change to new open textbooks because shedid not want any changes.

Participating in the tryout of the open textbooks

According to the questionnaires returned, 12 participants already indicated that they would participate in the tryout of the open textbooks, and a large majority said they would consider joining the trial (**Table 5**). Subsequently, a total of 24 schools have signed up for the tryout scheme. This is a satisfactory response. We believe that many of the schools taking part in the tryout would eventually use the open textbooks when they are fully developed in 2015.

Agreeing to try out	Primary	Secondary	Total
Yes	5	7	12
Maybe	18	40	58
No	9	9	18
Not yet decided	2	2	4

Table 4 Teachers agreeing to take part in the tryout scheme

In what way will teachers use open textbooks?

When a teacher adopts an open textbook in his/her class, they will either make changes to it before using, or will use it as reference materials. Very few teachers will just use the textbooks alone, or as-is. The pattern is quite similar in primary and secondary schools (**Table 5**).

Methods	Primary	Secondary
Using the original content as-is	3 (8.11%)	8 (13.79%)
Edit content	22 (59.46%)	32 (55.17%)
As reference materials	16 (43.24%)	26 (44.83%)
As self-learning resources	8 (16.33%)	14 (24.14%)
As supplementary exercises	0(0.00%)	1(1.72%)

Table 5 How would teachers use open textbooks in their teaching

As well, when teachers use an open textbook, they would make use of all the three formats (printed, PDF, and ePub3), and the printed version will be the most often used. Primary school teachers indicated that they will use the PDF and ePub3 versions more frequently (**Table 6**).

Expected frequency	Printed	PDF	ePub3
In primary schools			
Always	14	8	6
Often	4	8	9
Sometimes	4	7	7

Seldom	1	0	1
Never	0	0	0
Not answered	14	14	14
In secondary schools			
Always	12	3	2
Often	16	12	10
Sometimes	10	18	14
Seldom	0	3	6
Never	0	1	4
Not answered	20	21	22

Table 6 Which format of the open textbooks will be used?

What are the concerns of teachers in using open textbooks?

Teachers voiced many concerns on the use of open textbooks in the questionnaire. While they themselves are supportive of the act, they also need support from their peers, and from their school principals. Some have worries about the increased workload when they use the new textbook (compare with responses to **Table 2** on increased workload). They have to consider the adoption thoroughly, and to discuss with their fellow teachers on issues such as the option of a complete change to the new book, or whether they should use the open textbook as an additional resource. They have concerns on the quality of the open textbook (will it be approved by the Education Bureau at the time when they use it?). They need to assess the book with regard to the suitability of the level of the book for their students. There are also other concerns such as the availability of the whole series of the books (for all the levels of in the school), and whether there are associated supplementary teaching and learning resources (assessment tasks, quizzes, a question bank, a picture bank, additional readings, etc). Finally they also had questionsabout the sustainability of the Open Textbooks project. For example, they wonder whether will the textbookswill be deleted from the website when the funding of the project is used up. They wish that there would be professional development activities, i.e. training workshops for using the open books, and experience sharing sessions for teachers and users.

Some teachers whose schools are more heavily involved in e-learning would like to see more interactive elements of the e-version of the textbooks. They wondered if the ePub version could be edited and adapted. They also wished to see an interactive PC version for use by students who have a desktop PC but may not have a mobile device. For the mobile version, they wished to know if an Android format can be made available.

Considerations

Government support or blessing to the concept of OER seems crucial to initiate the development of an open textbooks project. With many examples of overseas government support to open textbooks projects, soliciting their support is now more easily achieved than before. The project team also find that government support for the project has helped tremendously in the subsequent development of the project. School principals and teachers are more willing to join projects which have gained government consent.

An environmental scan of the ecology of OER in the local education arena is important before starting an open textbooks project. An earlier study on the awareness and implementation of OER at the tertiary level in Hong Kong has helped the project team with the positioning of our project. Knowing that very few academics have engaged in the production of OER or open textbooks in Hong Kong, the project team acknowledges that publicity on the subject of OER and Open Textbooks is a mandatory precursor of the project.

The number of attendants to our briefing sessions on the tryout of open textbooks was deemed satisfactory. We were quite pleased with the number of schools now agreeing to participate in the tryout scheme (now 20). It is good to know that many teachers will consider using an open textbook, or part of it.

The majority of teachers indicated that they will make changes to the books before they use them, which is different from what the project team expected (we envisaged most teachers would use the open books as-is). It is therefore important that we have the 'Editor' function ready when the open textbooks are offered to the public.

Teachers expected to use the printed version of the textbooks most often, but they will also need to refer to the other versions 'often' or 'sometimes'. It will be an interesting study about how actually the three versions are used in the classroom and after class to achieve the most effective learning. To satisfy the needs of teachers interested in e-learning, more features using the ePub format will be considered, as these would add to the attractiveness of the e-textbooks. The issue of making the e-versions available on many platforms is one which we will seriously considered as well. [In our initial plan, we only provide an ePub version for iPad, or ePub in iOS format.]

Teachers also listed other concerns in using open textbooks and luckily all those have been well thought of by the project team. In order to promote support from peers and the school principal on the use of open textbooks, we need to have a supportive atmosphere. Frequent seminars and presentations on the concept and practice of open textbooks, as well as experience sharing sessions by teachers, will surely help with the movement. Their concern on quality can be resolved by OUHK's quality assurance mechanism, and EDB's textbook vetting system, both of which will ensure we will have a set of good open textbooks. This is further enhanced by the peer review and revision facility on the Open Textbooks platform.

On the sustainability of the project, we understand this is an important factor to consider when a teacher makes a decision to opt for the open textbook. Successful overseas examples are a good reference. The project team is certain that if the project is welcomed by users, it will have no problem finding the funds and the human resources to sustain its development.

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