

**THE CHINESE UNIVERSITY OF HONG KONG**

**Micro-Module Courseware Development Grant**

**Scheme 1: Basic Scheme**

**Interim Report (2016-17)**

Report due 31 October 2017.

Please return by email to [mmcd@cuhk.edu.hk](mailto:mmcd@cuhk.edu.hk)

**PART I**

Project title: Online Interactive Chemistry eLearning Videos for First-year Students

Principal supervisor: Ying-Lung Steve Tse

Department / Unit: Chemistry

Project duration: From May 2017 to April 2018

Date report submitted: 31 Oct 2017

(Our replies are in **blue**)

**1. Project objectives**

The two main objectives in this project are adding more interactive eLearning videos to the existing videos that are used to regularize the students' chemistry background and enhancing these video lectures by adding more questions to each video topic.

The project is currently on track for developing additional interactive videos, but since the targeted course has started this past September, we have not had the first results to evaluate the effectiveness of these materials.

**2. Progress on process, outcomes or deliverables**

*What have been accomplished so far?* We produced two additional video topics on "Buffers" and "Chemical Bonding". Therefore, we now have a total of 10 video topics. Out of these 10 topics, we have greatly enhanced the questions available for 5 of these topics. We have also sought help from ITSC for their professional service on drawing figures useful to the course.

*Have any obstacles been encountered and what are the remaining tasks to be finished?*

The topic "Chemical Bonding" involving "orbitals" is abstract and is always difficult to discuss it in a way that can be understood by most people. We spent lots of time to try to bring up the most important points without going into all the mathematical details. On the other hand, it is always not easy to come up with original questions. We did not just want to copy the questions from books, so we spent a significant amount of time to come up with these questions.

New student helpers are now being found as the previous students are now busy with their research work.

*Is the project still on time for completion (which includes preparation of the final report) on or before the grant expiry date?*

Given the current progress and rate, I believe the project is on time.

*Provide a listing of project outputs to date.*

Two additional topics have been completed and a total of 10 video topics are ready for use. Five of these ten topics have a good number of questions for the practice. We have also sought help from ITSC for preparing 8 figures that are useful for the course.

### **3. Evaluation Plan**

*Have you altered your evaluation plans?* No, but we now know the details more clearly. In the original proposal, we talked about putting our videos online and collecting various statistics. We plan to utilize the KEEP platform to ask questions and collect statistics for the viewership of the videos. We will be also able to identify which students of 230 have used these videos and compare their results with those who did not use the videos.

*Does your evaluation indicate that you have achieved your objectives?* Not yet, we need to wait till the semester starts in September. We have been keeping track which students are using these interactive videos and studying their performance in class. This should provide a good control for evaluating how effective these videos will be to regularize the students' diverse background.

### **4. Dissemination Activities (reports, websites, video links, products, etc.)**

The preliminary results up to Dec 2017 will be presented at the Teaching and Learning Innovation Expo 2017 at CUHK.

Please see our summary video for this report at

<https://www.dropbox.com/s/ymeaqfulsdav96h/report.mov?dl=0>