

Stretching is a vital component of physical education since it helps enhance the sports performance and reduce the risk of injury.

In order to enhance the teaching and learning performance of the required and elective Physical Education (PE) courses, stretching exercise (general stretching and skill-related stretching) would be introduced to all undergraduate students of required and elective PE courses through an online teaching video and an e-booklet. General stretching exercises fit all PE courses and are mainly for injury prevention, the skill-related stretching exercises are sports specific which fit into individual PE course and are mainly for performance enhancement.

The video is divided into a number of sessions of general stretching by different body parts. An index of skill-related stretching for different sports events has been provided in the e-booklet for users to set their own combination.

Through watching the video or reading the e-booklet before and after the lessons, the blending learning strategy of flipped classroom could be applied. Students can perform self-learning (e.g. pre-study and revision) by making good use of the online video and e-booklet. Thus, it is hoped to increase students' learning motivation, reduce their risk of injury and improve their performance on different sports.

Target students:	All undergraduate students taking Physical Education courses (includes required and elective PE courses) ^{Note 1}
Term & Year of offering:	1 st Term 2016-17 onwards*
Estimated class size:	20-28 students
Platform:	PE Unit website and Blackboard

Note 1: These students were mainly Year 1 students though there are some senior year students as all CUHK undergraduates are required to take Physical Education courses within their first study year.

*As a trial, 19 classes out of 164 classes (which have covered all of the 18 subjects of required and elective PE courses provided in 1st Term of 2016-2017) were selected to conduct flipped classroom activities with the micro-module produced. In other words, 436 students who had taken PHED courses had used the micro-module in 1st Term of 2016-2017.

MMCD Output

One micro-module was produced. An online teaching video of stretching of approximately 40 minutes has been produced. For easy reference, the video was further divided into a number of sessions of general stretching by different body parts. The summary of the teaching video was compiled into an e-booklet.

(Please Use Internet Explorer to open the links)

1) The online stretching video

i) <http://www.peu.cuhk.edu.hk/zh-tw/pe-courses/stretching> (Chi)

ii) <http://www.peu.cuhk.edu.hk/en-gb/pe-courses/stretching> (Eng)

2) The e-booklet

https://www.cuhk.edu.hk/peu/restricted/login/skill_stretching/Skill_related_Stretching_v7.pdf

3) A short video for the project

http://www.cuhk.edu.hk/peu/Intranet/mmcd_reportvideo/mmcd_reportvideo.htm

Evaluation

Both student surveys and focus-group interview were conducted to assess the effectiveness of the micro-module in facilitating teaching and learning.

In conclusion, responses received from students are positive. The vast majority of the participants agreed that the micro-module would broaden their knowledge concerning stretching exercises which includes general and skill-related stretching of various sports activities. In the long run, the risk of injury due to inappropriate stretching can be reduced.