Report on MMCD showcases (2015-18)

The CLEAR team has selected 21 projects as showcases for the next round of MMCD Grant.

Scope of the review
Four rounds MMCD projects from 2015-16 to 2017-18 (additional) were reviewed. Scheme 3 was excluded because the focus of scheme 3 is to support pedagogy research rather than micro module development. Projects with no final report submitted yet were also excluded.
A total of 118 projects were covered. Among the projects covered within the scope, 62 (53%) were accessible to the evaluation team.[1]

Criteria and selection procedure
Each project with accessible modules was reviewed by the CLEAR evaluation team according to a rubric (Appendix 1). The rubric covers 10 criteria related to the objective, audio, visual, and other factors influencing the quality of the video. The video content was not assessed at this stage as there is no subject expert in the evaluation team.

Each criterion has three possible points (0, 1, 2), so the maximum possible point for each module is 20. When a criterion is not relevant or applicable to a particular module, it is removed from consideration. The two points related to the criterion will be deducted from the total possible score, so that the overall percentage score is not affected.

The first accessible module from each project was selected for evaluation. A vast majority of the modules were videos. Projects from the same faculty were reviewed by the same evaluator to ensure consistency. Three projects with the highest percentage score from each faculty[2] were selected as showcases.

Cost consideration
The cost per module is used as an indicator of cost effectiveness. The projects are sorted into three groups (Low/Medium/High). Cost lower than the lower quartile are considered "Low", while those higher than the upper quartile are considered "High". Key statistics are shown in the table below.[3]

Min. cost per module	HK$646
Lower quartile	HK$8,839
Median	HK$13,337
Upper quartile	HK$21,717
Max.	HK$146,062
Average cost per module	HK$7,666
Average cost per project	HK$82,054
Average no. of modules per project	10.7
Median no. of modules per project	6

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[1] Some modules were not accessible to the evaluation team as they were only available to the students taking the course. Modules involving AR, VR, or mobile app were not accessed due to equipment limitation.
[2] As Law Faculty and Engineering Faculty had only 2-3 projects within the scope, they were grouped with "others" for this exercise.
[3] Note that projects involving VR/AR/mobile app were included in the sample for cost consideration. The unit cost per module for these projects tended to be at the higher end. Two projects with more than 133 modules each skewed the average cost per module toward the lower end. Funds from sources other the MMCD grant is not included in the calculation.

Result

The 21 selected showcase projects are summarized below. If you are interested in the detailed scores, please contact Alan HH Tse of CLEAR by email at alantse@cuhk.edu.hk.

	High Cost (>$21,717)	Medium Cost ($8,839-$21,717)	Low Cost (<$8,839)
Arts	**The Business Meeting Platform (2017-S1-3)** Sample MMCD Output: http://eltu.cuhk.edu.hk/files/3012/Module1/index.html#/lessons/swDIuuSzNqmv0yhgMHvlNAbhacRU6kH8	**Micro-Modules for Sign languages and Deaf Communities (2016-S1-2)** Sample MMCD Output: http://www.cslds.org/micro_module/chp1.php **Academic Writing Skills Modules (2016-S2-2)** Sample MMCD Output: http://eltu.cuhk.edu.hk/files/micro-module/	
Business Administration		**Mobile App for learning basic statistics (2015-S2-2)** Sample MMCD Output: https://edx.keep.edu.hk/courses/course-v1:CUHK+intro-stats-01+2016_01/courseware/c4a9c281aae8473ba5587fe363a8fe89/d8551a1e11584d94af85534845d8120d/ **Using Flipped Learning to Understand Market Competition (2017-S1-5)** Sample MMCD Output: https://www.youtube.com/watch?v=spfwtGoHdKM&feature=youtu.be	

		Understanding HK Current Economic Issues in Global and Regional Contexts (2015-S1-24) Sample MMCD Output: http://s3.amazonaws.com/One_Belt_One_Road/%E2%80%9DOne%20One%20Road%E2%80%9D%20%20Belt%20Road%20Initiative%20-%20Storyline%20output/story_html5.html	
Education	**Skill-related Stretching for Required and Elective Physical Education Courses (2015-S2-3)** Sample MMCD Output: http://www.peu.cuhk.edu.hk/zh-tw/pe-courses/stretching *(CUHK login required)*	**Flipped Micro-Module for Professional Sports Skills Courses (Phase II) (2017-S1-7)** Sample MMCD Output: http://facs.med.cuhk.edu.hk/site/2017/dl/cpr/story_html5.html **Flipped Micro-Module for Professional Sports Skills Courses (2016-S1-11)** Sample MMCD Output: http://facs.med.cuhk.edu.hk/site/2017/dl/sbu/story_html5.html	
Medicine	**A New Concept for the Micro-modules in Flipped Classroom of the Medical Education: Clinical Skill e-Learning Channel (2015-S1-19)** Sample MMCD Output: http://137.189.27.142/ec_skills_channel/ *(Access restricted to CUHK network only)*	**Animated Clinical Cases and E-learning Scenarios for Students (ACCESS) (2017-S1-15)** Sample MMCD Output: https://www.youtube.com/watch?v=vPPti3SoSjc&feature=youtu.be **A Flipped Classroom of System Dynamics Modelling for Public Health (2016-S1-24)** Sample MMCD Output: http://micromodule17.comuf.com/Ch1_DM.html	

Others (include Law, Engineering, General Education etc.)	**Flipping the Classrooms of the Two Foundation Courses in GEF Programme using Whiteboard Animations (2017-S2-4)** Sample MMCD Output: https://youtu.be/KOt0WCEbe-k **Building Whiteboard Animations for Flipped Classroom in GEF Courses (2016-S2-10)** Sample MMCD Output: https://www.youtube.com/watch?v=tAbMyRohjw0	**Fable-based Learning for Learning Discrete Optimization (2016-S1-15)[4]** Sample MMCD Output: https://www.youtube.com/watch?v=LJGRAlvUq9o&t=21s&ab_channel=CUHKChannel	
Science	**Development of Virtual Labs on Frontiers in Biochemistry (2017-S1-24)** Sample MMCD Output: https://www.cuhk.edu.hk/culive/vlab_2018	**Micro-Modules in Laboratory Safety (2017A-S1-7)** Sample MMCD Output: https://www.youtube.com/watch?v=l3GLV5wUWe0&feature=youtu.be	**Consolidation of pre-calculus knowledge with micro-modules (2015-S2-11)** Sample MMCD Output: https://www.math.cuhk.edu.hk/~klchan/learn.html
Social Science	**Micro-Modules for Flipped Classroom Teaching (2015-S2-12)** Sample MMCD Output: https://vimeo.com/162335499 *(Password: SOWK1114)*	**Interactive Micro-Modules for Flipped Classroom Learning of Remote Sensing (2016-S1-30)** Sample MMCD Output: https://panopto.cuhk.edu.hk/Panopto/Pages/Viewer.aspx?id=ef99486c-aa23-43ad-ae13-5b6f2928dec8	**Training video for Digital Video Production Workflow in Creative Media (2017-S1-27)** Sample MMCD Output: https://www.youtube.com/watch?v=b6PqCTFVYvk&index=1&list=PLxiRaXF6FN3qN8K+0A0QPER1Qy1uDfRkK6
Total	7	12	2

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[4] A majority of the funding for this project come from other sources. A total of $656,000 was used to produce 49 micro-modules (=$13,388 per module).

CLEAR Team

Associate Professor	LAM Lai Chuen, Paul	3943 4055	paul.lam@cuhk.edu.hk
Research Associate	LAU Ka Man, Carmen	3943 3535	carmenlau@cuhk.edu.hk
Research Associate	TSE Hiu Hin, Alan	3943 3530	alantse@cuhk.edu.hk

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