| **Final Report of Project** | **Project No. :** | **2012/0227** |

Part A

Project Title: _ Collaborative and Interactive Mobile Platform for LEarning (CIMPLE) _____

Name of Organization/School: ___ Hong Kong Baptist University _____

Project Period: From _____ Jan 2014 _____ *(month/year)* to _____ Nov 2015 _____ *(month/year)*

Part B

*Please read the **Guidelines to Completion of Final Report of Quality Education Fund Projects** before completing this part of the report.*

Please use separate A4-size sheets to provide an overall report with regard to the following aspects:

1. Attainment of objectives
2. Project impact on learning effectiveness, professional development and school development
3. Cost-effectiveness – a self-evaluation against clear indicators and measures
4. Deliverables and modes of dissemination; responses to dissemination
5. Activity list
6. Difficulties encountered and solutions adopted

Name of Project Leader: _____   Name of Grantee*: _____

Signature: _____   Signature: _____

Date: _____   Date: _____

* Final Report of Project should be submitted via "Electronic Project Management System" (EPMS). Once submitted, these reports are regarded as already endorsed by the supervisor of the school/the head of the organization or the one who signed the Quality Education Fund Agreement for allocation of grant on behalf of the organization.

1. Attainment of Objectives

Objective statement	Activities related to the objective	Extent of attainment of the objective	Evidence or indicators of having achieved the objective	Reasons for not being able to achieve the objective, if applicable
To provide a highly usable way to produce and share interactive contents and to support collaborative learning in which the students are encouraged to participate actively	1. Gathered user requirements and feedbacks from CAHCC 2. Web application platform and mobile applications development 3. Training workshop on CIMPLE system for CAHCC teachers 4. Trail lessons on using CIMPLE in P.4 and P.5 classes of CAHCC	Fully achieved	1. The CIMPLE web and mobile applications are developed and used in CAHCC 2. Teaching materials and students' classwork are stored in CIMPLE for sharing among the classes 3. CAHCC teachers started to use CIMPLE in other subjects, e.g. Chinese language lesson	
To allow students to understand how the ideas or answers are derived instead of getting the results only	Trail lessons on using CIMPLE (drawing pad apps) in visual arts lessons of CAHCC P.4 and P.5 classes	Fully achieved	1. Students showed that they are capable to apply the drawing skill in their artworks after viewed the replay of teacher's drawing in CIMPLE 2. Both teachers and students mentioned in the questionnaire that the replay function in drawing pad apps can helps students to understand how the ideas or answers are derived	

This form/guidelines can be downloaded from the QEF webpage at http://qef.org.hk.

Objective	Activities	Attainment	Remarks
To help students to build up creative, logical thinking and initiative characteristics	1. Trail lessons on using CIMPLE (drawing pad apps) in visual arts lessons of CAHCC P.4 and P.5 classes 2. Trail lessons on using CIMPLE (treasure hunt apps) in P.4 and P.5 classes of CAHCC	Fully achieved	Both teachers and students mentioned in the questionnaire that CIMPLE drawing pad and treasure hunt apps can help students to build up creative, logical thinking and initiative characteristics
To reduce students' learning capability diversity	Trail lessons on using CIMPLE (drawing pad apps) in visual arts lessons of CAHCC P.4 and P.5 classes Trail lessons on using CIMPLE (treasure hunt apps) in P.4 and P.5 classes of CAHCC	Fully achieved	Both teachers and students mentioned in the questionnaire that the replay function in drawing pad apps can allow students to learn and review at their own pace so as to reduce their learning capability diversity
To support the primary schools to conduct non-conventional learning activities more effectively		Fully achieved	CAHCC teachers expressed that CIMPLE treasure hunt apps and web configuration functions could much reduced their workload and manpower needed to conduct treasure hunt activity when comparing with previous workflow
To help teachers and parents to understand students' learning progress, strength and weakness	1. Web application platform and mobile applications development 2. Training workshop on CIMPLE system for CAHCC teachers	90% attained	CIMPLE provides a function to generate different reports on students' learning progress, strength and weakness for teachers' evaluation and reference CAHCC does not allow the parents to use CIMPLE at the moment.

Table 1: Attainment of Objectives

2. Project Impact on

The use of ipad in the traditional lesson can provide an alternative teaching and learning method to both teachers and students which encouraging more interaction and collaboration between teachers and students as well as students and students. During the CIMPLE drawing pad trial lessons, students were impressed by the replay function of the apps and some of them showed that they were capable to learn and apply the drawing skill immediately after viewed the replay of teacher's sample drawing. In addition, students were more willing to share and discuss their artworks with each other by using the replay function during the class. And through this sharing action, some students, who were not able to apply the drawing skill at the beginning, could learn and be capable to apply the skill on their drawing finally. It is one of the major targets of this project – to reduce students' learning capability diversity.

Since students could learn and apply the skill quickly, they were more confident and actively to discuss, share or even teach other classmates. It provided an opportunity for training their presentation and communication skills which are the important skills throughout their life. Furthermore, this interactive communication between them also improves the overall learning atmosphere and will be promoted to other subjects.

Treasure hunt app is another major application provided in CIMPLE package. It assists teachers to hold a non-conventional activity for the students. The game is played in group which aims to train students' team spirit, problem solving and knowledge applying on the real situation. During the trial run, it is observed that students worked as teams to discuss the questions of each check point and some teams also showed division of labour for solving the problem.

After the trail lessons on using drawing pad and treasure hunt apps, a survey was conducted to collect teachers' and students' opinions toward CIMPLE. There are 9 teachers (4 of Visual Arts and 5 of Mathematics) and 117 P5 students participated and the results are summarized as below:

Drawing Pad	Treasure Hunt
Over 70% students agreed this App can help them: - to understand the teaching materials and technique - to remember the points covered in the class easily - to understand their weakness - to increase the learning atmosphere and interaction with others - to bring up their creativity	Over 75% students agreed this App can help them: - to build up their team work spirit - to improve their problem solving skill - to increase the learning atmosphere and interaction with others
Teachers agreed this App can help students to build up their self-learning and creativity	Teachers agreed this App can help students to build up their team work spirit and leadership capability

In conclusion, the developed CIMPLE platform achieves the proposed project goals and it is believed that CIMPLE can be applied to other subjects with similar result.

On the other hand, a dissemination experience sharing seminar was held on 21st Nov, 2015. There are 17 teachers from 9 primary schools attended the meeting and most of them though that CIMPLE can enrich the current teaching methods and expressed their interest to use CIMPLE in their school.

3. Cost-effectiveness

Budget Items (Based on Schedule II of Agreement)	Approved Budget (a)	Actual Expense (b)	Change [(b)-(a)]/(a) +/- %
Staff Cost	$529,200	$524,017.74	-0.98%
General Expenses	$55,000	$40,238.56	-26.84%
Equipment	$110,000	$105,102	-4.45%

Table 2: Budget Checklist

All allocated budgets in this project are used for CIMPLE development and implementation. And there is around 26.84% of the general expense remained which mainly came from the promotional items expense because   team using the electronic means to promote CIMPLE such as setup a web site, seminar invitation and registration by email. Besides, some printing was absorbed by internal resources   . The unit cost for the direct beneficiaries in this project is around $2,545 ($669,358.3/263). In general, it is supposed that CIMPLE platform can be used for more than 3 years or even longer with appropriate software and hardware maintenance. Since the whole set of CIMPLE platform source code with setup and implementation manuals will be available for download (the distribution method is subjected to the discussion with QEF office), the other interested schools can deploy the current CIMPLE platform to their school without any cost incurred provided that they have similar hardware   .   Or in other words, the required cost to replicate CIMPLE by other schools without any additional hardware could be similar to the allocated equipment budget (i.e. ~ $110,000).

4. Deliverables and Modes of Dissemination

Item description (e.g. type, title, quantity, etc.)	Evaluation of the quality and dissemination value of the item	Dissemination activities conducted (e.g. mode, date, etc.) and responses	Is it worthwhile and feasible for the item to be widely disseminated by the QEF? If yes, please suggest the mode(s) of dissemination.
One CIMPLE web application and three mobile apps (Drawing Pad, Treasure Hunt and Homework Uploader) with setup and implementation manuals	The developed web and mobile applications are successfully implemented in CAHCC and meet the users' expectation	Deployed and used by CAHCC in visual arts and mathematics lesson of primary class 4 and 5 with 252 students and 11 teachers in 2014/2015 academic year	With the succeeded case in CAHCC, CIMPLE platform can be deployed to other primary schools with similar hardware. All CIMPLE contents can be included in one deployment package with well documentation or instruction videos such that interested schools can apply CIMPLE easily
One CIMPLE information web site		It was released on Dec 2015. It includes related information and function demonstration videos for the public to understand the goals of CIMPLE	

Table 3: Dissemination Value of Project Deliverables

5. Activity List

Types of activities (e.g. seminar, performance, etc.)	Brief description (e.g. date, theme, venue, etc.)	No. of participants				Feedback from participants
		schools	teachers	students	others (Please specify)	
Training workshop	Date: 27/08/2014 11:30 - 12:30 Venue: CAHCC Training workshop on CIMPLE system (mobile and web)	1	10			The functions provided by CIMPLE met the CAHCC teachers' expectations and would be trial run in selected Visual Arts and Mathematics lessons
Trial lesson for CIMPLE Drawing Pad	Date: 13, 20, 22& 24/10/2014 ~2 hrs per lesson Venue: CAHCC Trial lesson with P.5 classes for CIMPLE Drawing Pad	1	1 per lesson	26~36 per lesson		Both teachers and students agreed that the apps can fulfilled defined project goals. Some modifications were proposed for actual usage.
Trial lesson for CIMPLE Treasure Hunt	Date: 23/1/2015 11:00 - 14:00 Venue: CAHCC Training workshop and pilot run (with P.5 class A & C students) for Treasure Hunt	1	4	59		Both teachers and students agreed that the apps can fulfill the defined project goals. Some modifications were proposed for actual usage.

	Date: 27/1/2015 11:00 - 14:00 Venue: CAHCC Pilot run (with P.5 class B & D students) for Treasure Hunt	1	4	58	
	Date: 24/6/2015 10:00 - 12:30 Venue: CAHCC Pilot run (with P.4 students) for Treasure Hunt	1	7	128	
Progress update meeting with QEF Steering Committee	Date: 27/1/2015 14:45 - 15:15 Venue: QEF Head Office Progress update meeting with QEF Steering Committee				
Web System Demonstration	Date: 24/6/2015 14:00 - 17:00 Venue: CAHCC Demonstration on Web Administration System – Student Performance Statistic Section	1	2		The graphical presentation of student performance statistic is helpful for the teachers to study or review students' performance more easily, especially the trend of performance of a student from P1 to P6

| Implementation Experience Sharing Seminar and Workshops (Dissemination Meeting) | Date: 21/11/2015 13:00 - 16:30 Venue: HKBU CIMPE Implementation Experience Sharing Seminar and Workshops | 9 | 17 | Most of the participants think that CIMPLE can enrich the current teaching methods and expressed their interest to use CIMPLE in their school. |

Table 4: Activity List

6. Difficulties Encountered and Solutions Adopted

Three month project extension was applied as the recruitment process taken time such that project started late for around two month. ▮▮▮▮ team was capable to complete the development on time, however, extra time for finishing the project as a self-contained package (e.g. including user manual, training materials & video, etc.) are required for the project to be adopted easily in other schools (if any) in the future.