Final Report of Project

Project No.: 2011 / 0169

Part A

Project Title: Establishment of "Hong Kong Biodiversity Information System"

創建《 香港生物多樣性訊息系統》

Name of Organization/School: Ho Koon Nature Education cum Astronomical Centre (Sponsored by Sik Sik Yuen)

Project Period: From 12/2012 (month/year) to 09/2016 (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:	30 DEC 2016	Date:	3 0 DEC 2016

^{*} 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.



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
Provide an interactive platform for teachers and students to access comprehensive information of native biodiversity, for teaching and learning purposes.	Construction of a mega database containing more than 3,000 species with more than 10,000 photos, as well as 2 mobile Apps for offline use.	Attainment surpassed	Currently, 4,006 species and 26,000 high definition photos are included in the database	
Enhance teachers to use native examples in biology education and environmental education.	Biodiversity concepts and glossaries illustrated by local examples	Fully achieved	128 illustrated biodiversity concepts and glossaries included 135 High Definition videos added	
Enrich teachers' and students' knowledge on local biodiversity and arouse students' awareness on conserving the nature	10 workshops /seminars for training teachers on skills for exploring Hong Kong biodiversity Apps to be downloaded freely	Fully achieved	10 workshops and seminars successfully provided. Apps for mobile devices successfully built	
Provide comprehensive guidance and reference material for students conducting investigation projects related to Hong Kong nature.	80 localities and 200 habitats to be included in the database	Fully achieved	Actually 80 localities and 310 habitats are included	

Hong Kong Biodiversity Information System website link: http://www.nature.edu.hk/

Link to HKBIS app from Android Playstore: http://goo.gl/2hFmVe

Link to HKBIS app from Apple Appstore: http://goo.gl/rI3jpL

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



Table 2: Budget Checklist

Budget Items (Based on Schedule II of Agreement)	Approved Budget (a)	Actual Expense (b)	Change [(b)-(a)]/(a) +/- %	
Staff Cost	\$1,277,262.00	\$1,279,011.67	+0.14%	
General Expenses	\$55,000.00	\$11,692.20	-78.74%	
Equipment	\$68,600.00	\$91,220.00	+32.97%	
Service	\$170,500.00	\$177,740.00	+4.25%	
Others	\$8,838.00	\$0.00	-100%	

Table 3: Dissemination Value of Project Deliverables

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.		
A web-based mega database of Hong Kong animals and plants accessible by teachers and students 1 App	Quantity and quality of the content significantly surpass the targets set on the agreed proposal plan	- 2 workshops (14/12/2015, 19/12/2015), 33 teachers joint - Mass email to 788 biology teacher recipients - Mass email to 85 Integrated Science teacher recipients - Post on "Ho Koon Biology Facebook Page", 10,181 people reached, 115 likes and 58 shares - member registration counts and apps download counts became double after the	- advertising through links printed on small souvenirs to be distributed in different public activities, e.g. Hong Kong Book Fair		
The best of the later of the la		above listed activities - stickers attached to student tables - Announcement made in 2 events of ceremonies			



Table 4: Activity List

Types of activities (e.g. seminar, performance, etc.)	Brief description (e.g. date, theme, venue, etc.)	No. of participants			The second second	
		schools	teachers	students	others (Please specify)	
夜間生態考察技巧工作 坊	16/5/2013, 大埔滘	32	32	0		Feedback not measured
拍攝生物科教學影片入門工作坊	9/9/2013, 可觀中心	26	29	0		Rated 8.5 marks in average (10 marks as full mark)
"Investigation in Natural Sciences" and "Techniques and data analysis in field studies"	30/11/2013, 中文大學	~33	11	~250		Feedback not measured
觀鳥工作坊	25/4/2014, 中文大學	24	24	0		Rated 8.6 marks in average (10 marks as full marks)
電子顯微鏡在中學生物 科教學的應用工作坊暨 研討會	16/1/2015 可觀中心	26	26	0		Rated 9.1 marks in average (10 marks as full marks)
電子顯微鏡在中學生物 科教學的應用工作坊暨 研討會	24/1/2015 可觀中心	28	28	0		Rated 8.8 marks in average (10 marks as full marks)
生物多樣性速查 Bioblitz 工作坊暨研討會	5/6/2015 可觀中心	17	17	0		Rated 8.2 marks in average (10 marks as full marks)
生物多樣性速查 Bioblitz 工作坊暨研討會	13/6/2015 可觀中心	12	12	0		Rated 9.1 marks in average (10 marks as full marks)
可觀 20 周年開幕禮公布 《香港生物多樣性訊息 系統》	7/11/2015	~15	~50	~200	2	Feedback not measured
本港生物多樣性網上資源的教與學應用 工作坊暨研討會	14/12/2015 可觀中心	11	12	0		Rated 8.4 marks in average (10 marks as full marks)
本港生物多樣性網上資源的教與學應用 工作坊暨研討會	19/12/2015 可觀中心	21	21	0		Rated 8.9 marks in average (10 marks as full marks)
可觀 20 周年閉幕禮公布 《香港生物多樣性訊息 系統》完成	5/11/2016	~12	~40	~200		Feedback not measured



Difficulties encountered and solutions adopted

- 1. Unable to find suitable "Biodiversity Survey Officers"

 The plan is employing one "Biodiversity Survey Manager" and one assistant "Biodiversity Survey Officers". We found 2 highly qualified candidates. We applied to QEF Secretariat for changing the posts to two "Biodiversity Survey Managers", but not changing the overall salary expenditure.
- 2. The mega database needed to be updated continuously but funding would end.

 Use "Content Management System" CMS as the format for the Information system, such that the content of the database can be amended and new content can be created easily.
- 3. Two Biodiversity Survey Managers were unable to handle the huge amount of data entry. Invite student helpers and volunteers from the Universities during the summer holidays
- 4. Difficult to ensure the accuracy of the huge amount of taxonomical information Invite professionals in different taxa to do proof reading voluntarily.
- 5. Some rare living organisms are difficult to find
 Through relevant social media, invite local naturalists to provide photos of rarely found species.