Quality Education Fund
Application with Grant Sought Not Exceeding $150,000
Part B: Project Proposal

Project Title	Project Number
Using e-Learning applications to foster students' learning activeness and to cater to learner diversity	2015/0666 (Revised)

Basic Information

Yan Chai Hospital Chiu Tsang Hok Wan Primary School

Beneficiaries

    (a)   Sector: ☐ Kindergarten ☑ Primary ☐ Secondary ☐ Special *(Please tick)*

    (b)   Students: _____55_____ (in number)* and _____P3_____ (class level/age)*

    (c)   Teachers: _____8_____ (in number)*

    (d)   Parents: _____55_____ (in number)*

    (e)   Participating Schools (excluding applicant school): ___0___ (in number and types)*

Proposal
(I)   Project Needs

    (a)   Please state the aims of the project in clear and concise terms and elaborate how the proposed project could impact on school development.

        1. To enhance students independence and activeness in learning English by adopting the idea of flipped classrooms; to form a habit of self-learning before class, during class and after class;

        2. To encourage the participation of students by providing audio and visual assistance and interactive activities;

        3. To cater to learner diversity in speaking by providing audio guided reading to help lower ability students and multi-leveled activities to meet the different needs of students;

        4. To arouse the learning interest of students by conducting different interactive games or competitions with mobile devices;

        5. To develop teachers' professionalism on using e-Learning materials and designing various interactive activities with mobile devices in class.

    (b)   (i)   What are the areas of the needs and priorities of the school?
        (Please tick the appropriate box(es).)

☑ Enhance learning and teaching to facilitate students' knowledge on subjects / learning areas / generic skills development

☑ Enhance school management / leadership and teachers' professional development / wellness

☑ Others (please specify): Focusing on developing students' independence in learning and catering to learners' diversity

(ii) Please give background information to justify the demonstrated needs as mentioned in (b)(i).(*Please tick the appropriate box(es).*)

☑ School development plan: Cultivating self-study habits and catering to learner diversity are the main concerns in the school's 2013-2016 development plan.

☑ Survey findings: School conducted survey to interview 130 parents about IT education in 2014. 91% parents agreed School to utilize e-Learning materials to enhance students' ability on self-learning; 63% parents are willing to purchase IT equipment or services for e-Learning; 74% parents are willing to learn with their children under the e-Learning programme; 55% parents are willing to participate e-Learning parent workshop.

☑ Literature review: According to the report from eLearning resources development group of EDB in 2009, e-Learning is the trend of global development. It is interactive, flexible and collaborative; it can groom students' ability to manage information and self-study. Promoting e-Learning keeps the school's pace with the times and aligns the school's target on cultivating self-learning culture.

☑ Relevant experiences: Currently, teachers are applying eLearning applications from textbook publishers in class for arousing students' learning interest, consolidation or extended learning. We find that students learning through tablets have better understanding on the topics and the learning motivation is significantly higher than traditional teaching. In addition, for project based learning, we encourage students to utilize computers for exploring, researching, information managing and presentation. In our observation, students are fully capable to learn with IT no matter using tablets or computers.

(c) Please elaborate the innovative ideas or new practices to enhance, adapt, complement and/or supplement the existing practices that will facilitate the development of the school to address the needs specific to its own context.

1. <u>To establish students' independence and activeness on self-learning with the idea of flipped classrooms</u>

The school found students were lacking activeness in their learning. They rarely asked for help when they encountered difficulties and the sense of self-learning was rather weak.

The school promotes making use of IT to foster self-learning among students in recent years. This year, the school planned to apply for QEF to incorporate flipped classrooms to motivate students on self-study and enhance the involvement of students in the entire learning process.

Although some free Learning Management Systems (LMS) can be used, they are not suitable for our cross-boundary students from China. We have to look for a stable LMS for all students doing the assignments at home. In addition, the flipped classroom system should work with a recording whiteboard application for

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teachers to create tutorial videos for pre-lesson learning. The whiteboard app supports audio and tablet screen recording and inserting pictures on the whiteboard. After recording the video, teachers can create questions to test students' understanding. Teachers can also upload other multimedia materials instead of creating a video. Students are required to answer the questions after watching the video/ reading the materials. The system is able to auto-mark the exercise and feedback the correct answers to students instantly. Teachers can check the data-analysis including students' participation, students' performance, whether students complete the task after watching the video or without watching the video. The data can help teachers to understand students' progress and ability and then adjust the teaching plan of the coming class to cater for learner diversity.

We are looking for service provider for above flipped classroom system as we found that free apps only provide recording whiteboard but no exercise or data-analysis functions support. Also, the teachers involved in this project are English teachers who do not have much knowledge in IT and therefore we expect to purchase service from a vendor that will provide a comprehensive system with after school hours telephone support, four-hour response time support and four-hour service recovery support, teacher training, and on-site support if needed.

2   To cater to learner diversity by interactive learning contents / systematic students' data generation / multiple tasks assigned to different students
The school found the existing support of catering to learner diversity is not sufficient enough, and the range of students' level has gradually widened.

The e-Learning materials make every student enjoy a fancy, attractive and interactive learning experience. The fun learning environment can greatly enhance the engagement of students and thus facilitate the effectiveness of the lessons.

In addition, with the help of computerized assessments, teachers can group students based on their ability according to the data and assign right leveled exercises to different groups.

On top of the eLearning system, we will purchase a classroom management system to enhance the efficiency of learning. The system supports central control of students' devices including open apps / lock apps / students' screen monitoring / mass apps purchase and installation and customized settings. With these functions, we can greatly enhance the classroom management in eLearning classes. We expect this English eLearning project would not increase the burden of our IT colleague but enhance their knowledge on mobile device management. We planned to purchase service from a vendor that provides a stable mobile device management system with after school hours telephone support, four-hour response time support and four-hour service recovery support, a mobile device management training to IT / administrative staff and teachers, and on-site support if needed.

3.   To develop teachers' professionalism on e-Learning
The school encourages teacher professional development and our teachers are keen on learning new teaching methodology as to improve the effectiveness in teaching. Now teachers are utilizing multi-media resources from textbooks to arouse students' interest in learning.

The teaching team is dedicated in promoting student-centered and enjoyable learning environment by adopting e-Learning. Thus, we hope to strengthen our teaching resources bank, teaching strategies and continuously develop the ideal fun, self-motivated and interactive learning atmosphere.

We will arrange 3 teacher training workshops and an experience sharing meeting for parents. The duration of the teacher training workshops and the experience sharing meeting is at least 1 hour each session. The content of the training programme is as follows:
a) how to use the eLearning applications and flipped classroom to teach;
b) how to create eLearning materials; and
c) a demo lesson for teachers observation.

For each session of the teacher training workshop, a trainer including an assistant trainer has to be assigned by the vendor. The qualification of the trainer should be a degree holder, with teacher training experience and at least 2 years' experience in IT / eLearning.

(II) Project Feasibility

(a) Please describe the design of the project, including:

(i) Approach/Design/Activity

The programme is focused on English synthetic phonics in P.3 based on the area of PLPR/W with using a set of online interactive applications to conduct flipped classrooms teaching. Below shows how the applications to be used:

Module 1. Mouse to Mouse (Long Vowel "i")

	Objectives	How to use the applications
1.	Using the idea of flipped classrooms, to cultivate students' independence in learning	With the function of tablet recording, teacher creates tutoring videos to teach students basic concepts (e.g. Differentiate Short Vowels "i" and Long Vowels "i"). Students are required to watch the videos and complete tasks online before class.
2.	Catering to learner diversity by grouping, correct leveled activities and assessments	With the function of auto-marking from pre-lesson tasks, teacher knows the performance of each student and group students according to their ability. During class, teacher uses the applications to assign different leveled tasks to different students. (The more able students are required to give related words of long vowel "i" and the weaker students are only required to choose correct words from the word bank.) Through the apps, teacher can check every student's progress in a macro way and provide additional assistance to students in need.
3.	Arousing students' interest in learning	Through drawing board function, teacher assigns some long vowel "i" words and requires students to provide rhyming words.

		Teacher uses video quiz to check students' understanding and enhance students' learning enthusiasm.
4.	Ensuring the correctness of students' pronunciation	By using the function of audio recording from the applications, teacher assigns words / phrases / sentences containing long vowel "i" to students to read aloud and record. After lesson, teacher can check if the students can pronounce accurately.
5.	Encouraging students to peer-assess	Teacher makes use of the instant sharing function to share students' classwork which allows peer-marking. This encourages students to think and discuss which enhances students' interactions during class.

Course outline of PLPR/W P3

Module	Story	Letter Sound
1.	Mouse to Mouse	Long vowel "i" (i-e, ie, igh, y)
2.	Cool Kids	Long vowel "a" (a-e, ai, ay)
3.	The Pirate, the Parrot, and Fun at the Bun Festival	Long vowel "e" (e-e, ea, ee)
4.	Green Earth Project Week	Long vowel "o" (o-e, oa, oe, ow)
5.	Amy's Diary	Long vowel "u" (u-e, ue, ew)
6.	Florence and Drago	"l" blends. "r" blends, "s" blends

(ii) Key Implementation Details

Project period: May 2017 to Sept 2018

Month / Year	Content / Activity / Event	Target Beneficiary/Participants
5/2017-7/2017	1. Select suitable e-Learning platform and software tools 2. Purchase classroom management system 3. Purchase flipped classroom system for students' pre-class and after class learning. 4. Install cloud learning system	Principal Vice-principalCurriculum Development i/c IT panel head English Panel teachers
7/2017-8/2017	1. Professional development of e-Learning 2. P3 English seed teachers create the first set of e-Learning materials	P3 LETs and NETs for 2017/2018
9/2017-2/2018	1. P3 English seed teachers implement the plan 2. English teachers observe class 3. English teachers analyze students' reaction	P3 LETs and NETs 55 students IT panel head

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3/2018-5/2018	1. Seed teachers to share the experience to teaching staff and parents 2. Co-plan and refine teaching strategies 3. Parent reflection 4. Submit the final report to QEF (on or before 31/5/2018) 5. Submit the final financial report (on or before 31/5/2018)	P3 English Teachers 55 students IT panel head 55 parents Accountant
6/2018-7/2018	1. Conduct questionnaire to students and parents 2. Consolidate feedback and assessment results of students 3. Teacher sharing	P3 LETs and NETs 55 students 55 parents All teachers
7/2018-9/2018	1. Evaluate the effectiveness of the project	Principal, Vice-principal, Curriculum Development i/c, P3 LETs and NETs IT panel head
9/2018-12/2018	1. Submit the final report to QEF (on or before 31/12/2018) 2. Submit the final financial report (on or before 31/12/2018)	Principal, Vice-principal, Curriculum Development i/c, IT panel head, English Panel teachers Accountant

(b) Please explain the extent of teachers' and/or principal's involvement and their roles in the project.

(i) Number of teachers involved and degree of input (time, types, etc.):
P3 local English teachers and native English teachers, English panel head, IT panel head in total of 8 teachers will be involved of creating interactive e-Learning materials, utilizing the applications for teaching, promoting self-learning and interactive teaching at school, attending class observations, sharing sessions and co-planning meetings.

(ii) Roles of teachers in the project: (*Please tick the appropriate box(es).*)
☐ Leader   ☑ Co-ordinator
☑ Developer   ☑ Service recipient
☐ Others (please specify) _____

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(c) Please provide the budget of the project and justify the major items involved.

Grant Sought: HK$_____107,000_____.

Budget Item*	Expenditure Detail		Justifications
	Item	Amount ($)	
i) Staff	N/A	N/A	N/A
ii) Service	1: Authoring tools to create learning app and eBook	30,000	Select suitable e-Learning platform and software tools to help teachers transform existing materials to be e-Learning materials, as to reduce teachers' burden on curriculum preparation and to maintain the school-based elements.
	2: Classroom Control System	20,000	Purchase classroom management system to manage the learning applications and students' tablets.
	3: Cloud Server	20,000	Purchase flipped classroom system for students' pre-class and after class learning.
	4: Flipped Classroom system	22,000	Install cloud learning system to match with the use of classroom management system and flipped classroom system.
	5: Content migration services	10,000	Extra manpower required for documents' conversion and uploading existing materials to cloud learning system.
iii) Equipment	N/A	N/A	N/A
iv) Work	N/A	N/A	N/A
v) General expenses	Audit	$5000	QEF Requirement
vi) Contingency	N/A	N/A	N/A
Total Grant Sought ($):		**107,000**	

(III) Expected Project Outcomes

(i) Please describe how to evaluate the effectiveness of the project;
(*Please tick the appropriate box(es).*)

☑ Observation: English teachers will observe the students engagement level, motivation, and the learning atmosphere during class. Also, the data such as the completion of on-line tasks and the assessment results will be the statistics to determine the acceptance of students of the new teaching way.

☑ Focused group interviews: Conduct group meetings or interviews to selected students, teachers and parents to collect opinions from different parties.

☑ Pre-and post-activity surveys: Questionnaires will be sent to every participant (including teachers, IT staff, students and parents) before and after the project to understand the views of various parties and compare if any difference after the project.

☑ Performance change of students in assessment: The change of students performance can be reflected from the completed exercises and assessments collected in the system. The data will be analyzed in different areas – the level of participation, understanding, expression, and interest etc.

☐ Others (please specify) _____

(ii) Please state the project deliverables or outcomes.
(*Please tick the appropriate box(es).*)
☑ Learning and teaching materials
☑ Resource package
☐ DVD
☐ Others (please specify) _____
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Report submission schedule:

Project Management		Financial Management	
Type of Report and covering period	**Report due day**	**Type of Report and covering period**	**Report due day**
Progress Report 1/5/2017 - 30/4/2018	31/5/2018	Interim Financial Report 1/5/2017 - 30/4/2018	31/5/2018
Final Report 1/5/2017 - 30/9/2018	31/12/2018	Final Financial Report 1/5/2018 - 30/9/2018	31/12/2018