

Quality Education Fund
Application with Grant Sought Not Exceeding \$150,000

Part B: Project Proposal

Project Title E-Learning Platform for English Vocabulary Teaching and Assessment	Project Number 2016/0291 (Revised)
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Basic Information

Name of School: _____

Beneficiaries

- (a) Sector: Secondary
- (b) Students: 200 (initially) (in number)* and F.4 and F.5 (class level/age)*
- (c) Teachers: _____ (in number)*
- (d) Parents: _____ (in number)*
- (e) Participating Schools (excluding applicant school): 0 (in number and types)*
- (f) Others (please specify): This is a pioneering project. It is to be expanded to other schools after the pilot stage.

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 foster the effectiveness of students' learning of English vocabulary by exposing them to recurrent vocabulary exercises daily. Exercises are to be completed in students' own time off campus and their completion counts towards students' assessment in the school term
2. To enhance students' interests in building English vocabulary through reading short articles of current news and issues relevant to Hong Kong students every day.
3. To facilitate vocabulary learning and assessments of students through an automated electronic solution, allowing English teachers to focus their efforts in limited class time on other areas of English teaching that require more interactions between students and teachers, such as writing and listening.
4. To provide English teachers automated tools for performance management to track students' vocabulary learning progress, allowing teachers to assess the capabilities of individual students and to offer additional inputs to those in need of extra assistance.
5. To adopt such an approach in vocabulary teaching and learning for 1 academic year as a pilot programme and consider further expansion and extension upon reviews and evaluations.

In partnering with _____, founded by Professor _____, the Associate Dean of _____, the project aims to sharpen students' English proficiency before they enrol into university, so as to make our high school students more competitive in enrolling to top-tier local and overseas universities.

The collaborators _____ will provide advice, design the materials and help review the project in different stages.

(b) (i) What are the areas of the needs and priorities of the school?

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

(ii) Please give background information to justify the demonstrated needs as mentioned in (b)(i).

☒ Literature review summary:

A classical framework of vocabulary teaching (Richards, 1976) suggests that knowing a word involves more than just memorization. Instead, knowing a word entails knowing the word's usage limitations, its network of associations, derivations, semantic value, etc.

In other words, there are stages in the learning of vocabularies (Dale, 1965 and Paribakht & Wesche, 1993). From having never seen the word to seeing the word and knowing its apparent meaning such as through translation, to recognizing the word in context and eventually being able to use the word in self-constructed sentences, a successful build-up of vocabulary knowledge is gradual and in-depth.

Linguistic studies have had significant findings on the difficulties and strategies of learning vocabulary for second language speakers (Read, 2000). Many of those means involve audio and visual assistance such as pronunciations, sounds and mental images of words.

To summarize, students need to be deliberate and conscious in their acquisition of vocabulary knowledge. There should be an evolution and continuous growth of their vocabulary capability. Our project will provide a systematic approach for students to achieve this goal.

☒ Relevant experiences:

Vocabulary learning is vital to students' foundation in English. A wide vocabulary creates the building blocks towards students' general interpretation and usage of the language in all forms. This aspect of English learning has traditionally resorted to primarily rote memorization, where students as second language speakers of English recite English words and phrases based on their literal meanings in Chinese. Such practice is understandable. However, we find it insufficient when applied alone to students. Students' long term retention of vocabulary knowledge and their application of such knowledge are unsatisfactory, as memorization works relatively well in shorter terms only. We need a solution to help students learn and apply, not just memorize words. The solution should not occupy much class time or on campus efforts as our classes have already been loaded with teaching syllabus in grammar, reading, writing and speaking.

, has interviewed thousands of high school graduates conducted in English, so he very much understood the strengths and weaknesses of our local students in learning English.

(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.

Contextual Learning

Vocabulary should be learnt in context. In this regard, we prefer students to expand their vocabulary by reading short passages of English articles, typically related to their daily life. In the articles we are going to provide in this project, the flows of logic, arguments and relationships create concrete background examples of how particular words fit and how they are utilized in the language. When given such contextual information, it is much easier for students to relate the definitions of new words to their applications. Students are able to create mental pictures of such associations as they assimilate the information and create the relevant knowledge in their own minds. This knowledge is much more retainable in students' memory and applicable in practice when students speak, listen, read and write.

The following is a sample article together with assessment questions and answers for reference. The bold words are the new vocabulary we would like students to learn.

Sample article

1.1 Read the following article with the target vocabulary in bold.

“Want to buy a copy watch?” is the question often asked in Hong Kong’s tourist areas. Nowadays, many people are buying the fake watches and not the **authentic** ones. They think that having an expensive wristwatch will impress their friends. However, the image the friends will remember is a rusted watch in two weeks. So, don’t try to **impress** your friends. If they need to be impressed, they are not your friends. Be real.

Sample questions

Please bold and color the correct answer in RED.

1.2 Target vocabulary - Question A

Question A:
1. <i>Authentic</i> means A. rusted B. fake C. real
2. To <i>impress</i> means to A. press B. fix in mind C. buy something

1.3 Target vocabulary - Question B

Question B:
1. There’s a Greek restaurant in town which serves wonderfully prepared _____ dishes. a) fake b) authentic c) expressionless
2. Your mother was clearly not _____ by our behaviour in the restaurant. a) impressed b) depressed c) pressed

Relevance

To have students on-board with this vocabulary learning approach, the contents should be interesting and attractive to them to ensure incentives and motivations. Therefore, for the exercises, we propose to source articles that are generally relevant to students’ interests, ranging from arts to science to business, and introduce relevant vocabularies within these articles. The topics can be domestic and international news, economic issues, business developments, scientific researches, technology

developments, etc. The topics of the articles will also tie in with those in the school-based English Language curriculum. To achieve the aim, a working team consisting different parties will be set up to discuss the topics of the articles to be included. Those topics are all spelt out in the Schemes of Work of the school-based English Language curriculum. By creating real world and specific contents to students, we can avoid any hypothetical writings or scenarios to ensure students indulge and remain interested enough in completing the exercises.

Effective Means

Time is of great concern to both students and teachers in English learning and teaching. Paper-based assignments and assessments found on reading and writing tasks have occupied much of students' and teachers' time on writing and grading respectively. To avoid further burdening them, we propose to conduct the vocabulary exercises in electronic formats. The exact format of an exercise is as follows:

Students are given an article of approximately 100 words, together with a native speaker's voice recording. Each article targets 2 featured words or phrases for students. Students answer 2 relevant multiple-choice questions to complete the exercise.

Students are to complete the exercises online, while their submissions and progress are stored electronically and grading are done automatically by the electronic system. As building students' word power is our primary concern, any time saved from students having to physically write and teachers to physically grade are beneficial as they can devote their precious time to other aspects of the English teaching/learning and assessment.

There are a number of learning strategies students can learnt through using the platform. First, students have the opportunities to make use of contextual clues to guess word meanings, in turn, develop the strategy to further improve their reading ability. After reading the set articles, students will also be able to associate the targeted words they have learnt with other similar reading texts they read in everyday life.

As the topics of the articles tie in with those in the school-based English Language curriculum, teachers can arrange in-class discussions with students on some of the articles developed for the platform. The strategies of 'personalisation' in vocabulary teaching can then be presented. The ways to personalise new words include association and application. For word association, students can make personal association of the word, e.g. why/when/where they think it is used, what image it evokes, what words it is associated with, who would usually use it, etc. For application, students can use the targeted words of the platform in sentences, short dialogues or even comic strips, preferably involving someone they know or drawing on their real life experience. Students will find strategies of applying the learnt words useful and meaningful.

Project Feasibility

(a) Please describe the design of the project, including: Approach/Design/Activity

Strategy

As we are targeting an electronic solution, sourcing an online e-learning platform from a third-party vendor addressing our specific needs in vocabulary learning is our main objective. We require a custom-made platform catering to students for their exercise submission, and catering to our teachers to automate grading, performance management of students and content management of the article, vocabulary, question and answer sets. Since our target students at the pilot stage come from F.4 and F.5 only, the platform is to be light-weight and economical to develop, run and maintain for one academic year.

On top of the platform, the article, vocabulary, question and answer sets need to be of high quality. We intend to contract a native English speaker with reputable academic background, for one academic year, to regularly provide such content to us through the platform. Our English teachers have the final control over the contents through the platform before they are presented to students as exercises.

Platform Design

Ease of access:

Since the exercises are intended for completion off campus, the online platform is designed in a web format, running 24/7 and accessible anywhere and anytime. Students only need to visit a designated website to obtain access to the exercises. Our teachers by visiting the same website can manage the article contents, review student submissions and monitor students' performance and progress.

Audio and visual aids:

Visual aids such as font size, colouring and layout of texts are to be easily adjustable by teachers and students in the online platform to aid students' concentration throughout their learning experience. Audio aids such as voice-overs of the articles and the featured words are to be directly accessible through the platform without requiring further preparations or downloads by teachers or students.

Individualized learning records:

Each student keeps his or her own record of articles viewed, words learnt, submission results and teacher feedbacks. The records serve as a comprehensive source for students' vocabulary revision purposes.

Submission and progress management:

Our teachers can review the submission status of students and their learning progress throughout the academic year.

Automatic grading and recording:

All multiple-choice answers are automatically graded against the correct solution once students submit their exercises and all results are properly stored under students' learning records.

Integrated feedback and commenting tools:

Our teachers can utilize integrated web forms and editing tools on the website to provide custom and verbal feedbacks to individual student's submissions.

Performance review:

Our teachers can target students who are in need of further assistance as submission results of students are individualized and readily viewable by teachers.

Trend and statistical analysis via dashboards:

Students' overall submission and performance statistics are available for teachers to utilize and in turn can help teachers adjust the article contents and modify or enhance their teaching in class if needed.

Technical Requirements

Given the platform's relatively small scale, all of the required computing architecture and hardware will be cloud hosted. Our third-party platform vendor will be responsible for managing the deployment and liaising with cloud providers to fix any computing issues. We as English teachers, from the school's perspective, only need to focus on the teaching elements of the project.

Student Participation

At the start of the academic year, students will be introduced and registered to the e-learning platform. Following their English teacher's instructions, they will commence their vocabulary learning with the platform. Article sets will be provided to them daily. They will be free to complete the exercises anywhere they want, but are required to submit the exercises before certain due dates.

Teacher Participation

At the start of the academic year, our English teachers will introduce the e-learning platform to our students and instruct them on the usage. Over the course of the project, teachers will review and select the articles prepared and release them as exercises for students. Teachers will periodically review students' submission status, learning progress and provide feedbacks to them. Teachers will utilize the statistics and analytics available to make appropriate adjustments to their English teaching or the contents served by the platform.

Third Party Participation

Throughout the academic year, article writers and the platform vendor will be assisting our teachers in the project, namely the article provider and the platform vendor. The article provider will regularly submit article sets onto the platform for teachers' review and approval. The platform vendor will take care of all potential technical issues arising from the day to day running of the platform and to incorporate any additional feature requirements or changes into the platform.

(ii) Key Implementation Details

Project period: (September 2017) to (July 2018)

Month / Year	Content / Activity / Event	Target Beneficiary/Participants
September 2017	Project manager and coordinator to arrange interviewing and hiring of third parties, namely the article provider and the platform vendor	Teacher Lead/ School
September 2017	Teacher lead and the article provider to confirm with the platform vendor the business requirements and the functionalities of the platform, to review platform mock-up Platform vendor to advise appropriate technical solutions to the requirements, analysis and adjustments to be made to the requirements and any technical limitations to be reviewed	Teacher Lead, Article Provider, Platform Vendor
October 2017	Platform vendor to commence the actual development work	Platform Vendor
October 2017	Platform vendor to complete initial delivery	Platform Vendor
Late October 2017	Teacher lead and the article provider to complete user acceptance tests and resolve with the platform vendor any issues and limitations	Teacher Lead, Article Provider, Platform Vendor
Late October 2017	Teacher lead and the school to arrange training sessions on using the platform for all relevant English teachers Platform vendor to deploy platform rollout for the school year 2017-2018	Teachers/ School, Platform Vendor
November 2017 to July 2018	Production deployment of the platform Teachers to coordinate students' learning and review students' progress Article provider to regularly supply article contents to the platform Students to actively participate in the learning experience Platform vendor to stand-by for and resolve any potential technical issues	Teachers, Article Provider, Students, Platform vendor
January 2018	Teachers and the article provider to perform progress evaluation on the effectiveness of the exercises and apply appropriate adjustments for the second academic term	Teachers, Article Provider
July 2018	Teachers and the school to perform final evaluation on the project	Teachers/ School

(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.):

All F.4 and F.5 English teachers are involved in the project.

The English Panel Head will be the teacher in lead/ for project management tasks such as funding matters and project evaluations. He will coordinate with the article provider and the platform vendor,

and will provide initial training to the rest of the teachers prior to the platform rollout. The coordinators of F.4 and F.5 of the English Department will also be helping actively in the programme. The Article Provider will help develop the articles and also work collaboratively with the teachers for fine-tuning the articles during the implementation period.

Rest of the teachers will receive training on the usage of the platform from the lead/ coordinator. They will manage students' vocabulary learning of their own class as described in Section II Project Feasibility throughout the academic year. They will participate in the project evaluations and provide feedbacks regarding the execution and effectiveness of the project.

(ii) Roles of teachers in the project: (Please tick the appropriate box(es).)

☒ Leader ☒ Co-ordinator ☒ Service recipient

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

Grant Sought: HK\$131,000

Budget Item*	Expenditure Detail		Justifications
	Item	Amount (\$)	
i) Staff	NIL	-	-
ii) Service	Domain Name Registration	\$200	This item includes the registration costs for a domain name, i.e. a web address for the online platform, for 1 academic year
	Cloud Computing Service required for running the platform:	\$500/computing server/month x 1 server x 10 months = \$5,000	This item includes the aggregate cloud computing costs incurred to the cloud computing providers over 1 academic year for hosting and managing the platform infrastructures
	1. Application and Media Servers	\$100/month of cloud storage of media files x 10 months = \$1,000	
	2. Database	\$600/month of database service x 10 months = \$6,000	
	E-Learning Platform Development by Platform Vendor	\$250/hour of web development costs x 280 development hours = \$70,000	This item includes all software development costs incurred to the platform vendor, and its agreement to address any production technical issues post development.
	Article Sets Supply by Article Provider	\$175/article set x 250 sets = \$43,750	This item includes the costs incurred to the article provider based on per unit calculations. 250 article sets (writing + voice recording) are needed for the academic year to cover daily exercises.
iii) Equipment	NIL	-	-
iv) Works	NIL	-	-
v) General expenses	Audit Fee	\$5,000	
	Others	\$50	
vi) Contingency	NIL	-	-
	Total Grant Sought (\$): \$131,000		

(III) Expected Project Outcomes

(i) Please describe how to evaluate the effectiveness of the project;

☒ Observation: We will observe and compare the academic performance of students based on their level of participation.

☒ Focused group interviews: Teachers and students are randomly selected to have focus group interviews in order to have a deeper understanding on the effectiveness of this project.

☒ Pre-and post-activity surveys: Surveys will be distributed to collect individual opinions about the usefulness and effectiveness in learning English in this project.

☒ Performance change of students in assessment: We will set questions or conduct mid-term tests to help students revise the words learnt as well as to assess their understanding. The following measures will be implemented to evaluate the success of the project: (i) Student questionnaires (mid-term and final) – over 60% of students agreed that the platform is useful, (ii) Teacher feedbacks – positive and they observe improvement of students' vocabulary in dictations and writing, etc.

(ii) Please state the project deliverables or outcomes.

☒ Learning and teaching materials

An online e-learning platform will be delivered and maintained for the duration of 1 academic year (2017 to 2018).

250 sets of articles, featured words, voice recordings, assessment questions and answers will be delivered on the platform as learning and teaching materials. The articles developed in this project are copyright-free for the ease of dissemination in the future.

Assets Usage Plan

Not applicable (N/A) at present

Report Submission Schedule

The applicant school commits to submit proper reports in strict accordance with the following schedule:

Project Management		Financial Management	
Type of Report and covering period	Report due date	Type of Report and covering period	Report due date
Final Report 01/09/2017 - 31/07/2018	31/10/2018	Final Financial Report 01/09/2017 - 31/07/2018	31/10/2018